Vol. XV. MARCH, 1877. No. 87.

THE

# AMERICAN PRACTITIONER:

A MONTHLY JOURNAL OF

## MEDICINE AND SURGERY.

EDITED BY

DAVID W. YANDELL, M. D.

*Prof. of the Science and Art of Surgery and Clinical Surgery, University of Louisville,*

AND

THEOPHILUS PARVIN, M. D., LL D.

*Professor of Obstetrics and the Medical and Surgical Diseases of Women, College of Physicians and Surgeons of Indiana.*

PUBLISHERS:

JOHN P. MORTON & CO., LOUISVILLE.

YOHN & PORTER, INDIANAPOLIS.

THREE DOLLARS PER ANNUM.

# CONTENTS.


ORIGINAL COMMUNICATIONS:

SHOULDER AND OTHER MORE TRANSVERSE PRESENTATIONS. BY EDWIN R. MAXSON, M. D. . . . . 129

OPERATIONS FOR STRANGULATED HERNIA. BY GRAHAM N. FITCH, M. D. . 142

REMEDY FOR HEADACHE. BY JOHN E. LOCKRIDGE, M. D. . . . . 144

THE SETON IN PARALYSIS AND EPILEPSY. BY THOMAS J. GRIFFITHS, M. D. 147

ARE BACTERIA NORMAL? BY J. GARDNER, M. D. . . . . 153

REVIEWS . . . . . 159

CLINIC OF THE MONTH . . . . . 165

NOTES AND QUERIES . . . . . 185


Articles intended for the *Original Department* of this journal must be contributed to it exclusively.

The editors are not responsible for the views of Contributors.


**THE REPUTATION**

Which the celebrated SELTZER SPRING of Germany has maintained during many years, for the therapeutic value of its waters, is a fact well understood by the Medical Profession. The testimony of large numbers receiving benefit from their use is conclusive proof as to their efficacy. TARRANT'S SELTZER APERIENT is an artificial combination of the essential elements of these waters, as ascertained by strict chemical analysis, discarding those substances which are inert, and retaining those only which have a positive therapeutic value. These waters belong to that class known as ACIDULO-ALKALINE, which owe their medicinal virtues to the Carbonic Acid and to the Salines in combination. Hence they act chiefly on the digestive, renal and nervous systems.

**AS A SALINE CATHARTIC,**

We especially recommend our preparation to the careful consideration of Physicians. In all disordered conditions of the digestive organs, especially when connected with hepatic derangement; in those congested states of the alimentary canal and appendages peculiar to warm seasons and tropical climates; in the various forms of Dyspepsia, including Constipation, Acidity, Heartburn, etc.; in Uterine Disease, connected with an inactivity of the large intestines; as also in the nausea of pregnancy; in febrile conditions; in short, in all those types of disease where Saline Purgatives are indicated, we have no hesitation in recommending it as a mild yet efficacious Cathartic.

**AS A DIURETIC,**

Its action is none the less marked, for in diminished doses its influence is transferred to the renal system. Hence in Rheumatism, Gout, Dropsy, and Diseases of the Urinary System, the SELTZER APERIENT can be relied upon to correct the acidity of the urine, and promote a copious renal secretion.

**AS A PALATABLE CATHARTIC,**

Our preparation is surpassed by no other. It completely removes that horror and disgust so often expressed in taking saline cathartics. Instead of nauseating a delicate stomach, it is cooling, refreshing, invigorating, making it especially desirable in that class of diseases where salines are administered in frequent and long continued doses. It is convenient for administration; being in a pulverized form, it only requires the addition of water to create at once a sparkling and refreshing beverage.

**IT HAS STOOD THE TEST OF TIME;**

Successfully, and has received the flattering commendation of many eminent Physicians who have proved its adaptability to the diseases for which it is recommended above.

*MANUFACTURED ONLY BY*

TARRANT & CO.,

*278 Greenwich St., New York.*

☞ For sale by all Druggists. 77-17

# THE AMERICAN PRACTITIONER.

**MARCH, 1877.**

Certainly it is excellent discipline for an author to feel that he must say all that he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than any thing else.—RUSKIN.

---

## Original Communications.

---

### SHOULDER AND OTHER MORE TRANSVERSE PRESENTATIONS.*

BY EDWIN R. MAXSON, ESQ., A. M., M. D., LL.

By shoulder and other more transverse presentations, I mean to include here all those cases of preternatural labor in which the shoulder or some part of the body of the child presents, whether the hand or elbow may chance to come down or not, the position being really quite transverse in shoulder presentations.

The position, more or less transverse, is an accident occurring in what would otherwise have been a head presentation; the hand, elbow, or even shoulder presenting, constituting a mere circumstance, which may add nothing to the difficulty. In all the more or less transverse cases, it is some part of the child's body or shoulder which lies over, or fills the strait, constituting the presentation.

* Read before the Syracuse, N. Y., Medical Association, February 6, 1877.

*Causes.*—Lateral obliquity of the uterus is one of the causes of this form of preternatural labor; for the head of the child, in such cases, may be pressed, by the uterine contractions, across the brim of the pelvis to the opposite side, instead of passing into the superior strait, causing the shoulder or some part of the body to present.

This more or less transverse position, with or without a shoulder presentation, is more likely to occur when the *abdomen* of the mother is short but of great circumference, as in the case of big short women; as the womb, at the full time of utero-gestation, is apt in such cases to lie almost transversely across the abdominal cavity, being pressed upon by the diaphragm from above, the contractions of its fundus, thus lying to the right or left, sending the head across the brim of the pelvis to the opposite side, causing the shoulder to engage and present, instead of the head.

Or the child may, in such cases, be pushed so far across as to carry the shoulder past the strait, causing the abdomen, one side, or back to present, as I have witnessed. It is when the abdomen presents, in these transverse cases, that the cord is most likely to prolapse; and when one side, the elbow or hand.

I knew one big short woman that had, at one confinement, an abdominal presentation with prolapsed cord; and another, with whom four consecutive confinements were attended with shoulder presentations; the great circumference and shortness of the abdomen, in both cases, evidently constituting the cause.

*Diagnosis.*—Early, want of the natural convexity of the bag of waters, and instead a cylindrical form, may afford presumptive evidence that the position is abnormal. Later, by the touch; the scapula, shoulder, ribs, spine and arm, especially if falling down, may render the diagnosis clear. And this examination should be made, when necessary, as soon as the dilatation will easily and safely admit of it, so that there may be a certainty that it is the shoulder or body which presents.

*Treatment.*—Our early English ancestors, in the days of Queen Elizabeth, as related by Thomas Rainold, in his "Woman's Booke," used to push up the presenting shoulder "till such tyme as the head came forwarde." But whether they ever succeeded in thus getting the head does not fully appear. If they did, their failures were so general that another proceeding was instituted, that of turning and delivery by the feet. And this has been the universal rule with obstetricians, so far as I know, till my first deviation from it in 1860, and which *position treatment* I fully published in 1867 in this country and abroad.

This turning and delivery by the feet may be done, in most cases, after the mouth of the uterus is sufficiently dilated to admit the hand. But sometimes it has been found impossible, by the most skillful hands; and delivery has been effected with the child double, the thoracic and abdominal viscera having been previously removed.

*Its Dangers.*—The dangers attending the process of turning and delivery by the feet—podalic version—are best appreciated by those who have had the most experience in it.

To the *mother* there is a liability of a fatal contusion of the parts, as well as of laceration of the uterus, as all discreet obstetricians must admit; two fatal cases of laceration having fallen under my observation, and both in competent hands.

To the *child* there is great danger of death being produced by the act of turning; and also the additional danger attending every footling case, as all are aware who have had much experience with them.

I knew of a lady that lost three children by the process of turning and delivery for shoulder presentations, and, as I have good reason to believe, in the hands of judicious and competent obstetricians; and, in this case, the pelvis was capacious, as was proved by a subsequent birth, the only peculiarity in the build being a large but short abdomen.

*My Position Treatment.*—To push back the shoulder, or get the head, is evidently the indication in shoulder and all the more transverse presentations. Many of our best obstetricians

have assured me that they have repeatedly made the attempt, and as often failed, and then proceeded to turn and deliver as best they could.

Taking into account the fact that gravity and uterine contraction both offer resistance to such an effort, it does not appear strange that failure should be the general, if not the invariable, result; and so it appears to be when both these influences oppose. Not so, however, if one of them, instead of opposing, is made to aid in the process of pushing back the shoulder or body of the child, and thus allowing the head to enter the superior strait, constituting a natural presentation, with absolutely no danger to mother or child, and scarcely an inconvenience of two minutes' duration.

Gravity, then, is the influence to be turned from an opposing agent to an efficient aid in the accomplishment of the change to be made. And, to effect this, it is only necessary, in shoulder and all the more transverse presentations, when the mouth of the womb is sufficiently dilated to admit the hand, as in the act of turning, to have the woman kneel upon folded quilts in the middle of the bed, of a sufficient height—say from twelve to eighteen inches; her face being brought down forward upon a pillow, so as to bring the body to an angle with the bed of about forty-five degrees, the attendant getting to the side toward which the womb is reclining, and opposite that to which the head of the child is pushed. Then, with one hand gently pressing externally against the reclining uterus, the arm if down being carried up, or if not the other hand, well oiled, being pressed against the presenting shoulder, if not already carried back; and if so, or if it were the body that presented, following up with the hand, the fingers being gradually spread out, till the head is grasped and conducted to the superior strait, aided by the external pressure of the other hand, crowding the base of the womb to the center of the abdomen, if gravity alone should not fully accomplish this. After a pain, the woman may be turned down upon her back or one side, the grasp being retained till another pain or two shall have caused the head

to become engaged, thus constituting a natural head presentation.

In some cases, no internal manipulation may be necessary, as I have found, the *position* and external hand and pressure doing all; without it, however, it may be a little uncertain which extremity of the child will present. But as this position so completely relaxes the muscles about and opens the vagina, there is little or no resistance to the introduction of the hand; and hence it will generally be best to follow back the receding shoulder, or so pass the hand, if it is some part of the body which presents above the superior strait. The ends of the fingers and thumb should be kept together till they are extended to grasp the head, which may generally be found about or entering the superior strait, taking the place before occupied by the shoulder or body of the child.

The *middle* of the bed is quite important as the place for the woman to kneel upon the quilts. For, as these shoulder and all the more transverse presentations are generally the result of a lateral obliquity of the uterus, the woman should be turned down upon that side to which the head of the child was directed, and opposite to the position of the attendant, in order to overcome the uterine obliquity, prevent its recurrence, and favor the subsequent stages of the labor. This it will generally do, as by the gravity and gentle external pressure the base of the womb will thus be brought to the middle of the abdomen, the first pain pushing into, and causing to engage in the superior strait, aided by the digital grasp, the head of the child. Even without the digital aid, the *head* will present much more frequently than the other extremity, the head being more frequent than footling presentations in ordinary uncomplicated cases of labor.

It is important that the attendant should place himself on the side of the bed opposite to that of the head of the child, not only to be out of the way in turning the woman down, but also that the one hand may be in a favorable position to press gently against the base of the reclining uterus, and the other to introduce and grasp the vertex, and conduct it to the

superior strait. Thus, when the head of the child is to the right of the mother, the attendant being on the opposite side of the patient, uses the right hand for the internal manipulation, and the left for the gentle external pressure, when any is required. And when the head lies to the left of the mother, the attendant being at the opposite side, uses the right hand for the external pressure, and the left for the internal manipulation required.

In cases, however, in which there may be no apparent lateral obliquity, the child tipping forward, in a very anterior projecting abdomen, it becomes a matter of indifference upon which side the attendant places himself, or which hand is used, externally or internally, as the *back* is the best position. It tends, by the influence of gravity, as in other cases, to favor the entrance and engagement of the head, as well as the subsequent stages of the labor.

I have never known or heard of a failure, in a properly directed effort, put forth in the manner I have directed, for thus changing a shoulder or other more transverse into a natural presentation. And where little or no internal aid was attempted, I remember of but one case in which the "pelvis and feet presented," and this terminated favorably in very judicious hands. In fact I do not believe there ever can be a failure in judicious hands, unless there should be such deformity as to render delivery impossible with the best of presentations. And further, I have never, in this country or abroad, found a man who confessed to me a prejudice against the treatment; but with one accord, all who have put it in practice or carefully examined the principles involved, have, so far as I know, hailed it as an improvement calculated to relieve the obstetrician of anxiety, and to save from peril the two most worthy objects of our sympathy and care—both *mother* and *child*. Great stupidity might lead to a failure.

*History.*—I was never satisfied with podalic turning and delivery in shoulder or other more transverse presentations, though I could not suggest a better course to pursue in such

cases till 1860, at which time the following circumstances led to my plan of position treatment:

Early in the summer of 1860, while practicing in Geneva, New York, I was called on by a Scotch lady, who had just become a resident of the town, saying that she was pregnant for the fourth time, and expressing great concern in relation to her approaching confinement, inasmuch as all her previous labors had been attended with shoulder presentations, the turning and delivery resulting in the death of the three children. She had been advised to consult me; and though she attached no blame to her attendants, saying they were "competent men," she expressed a hope that I might be able to "devise some other means of delivery," whereby this fourth child might be saved, should there be another shoulder presentation: and that there would be she appeared to feel confident, as her former attendants had told her very sensibly that her "build" was the cause, being short with a capacious abdomen. I told her I would consider the matter, and see what could be done; but did not arrive at any definite determination till several weeks after, when the following occurrence afforded a basis from which I afterward deduced my present plan of treatment.

Being called out of town by Dr. George N. Dox, an eminent physician of the place, in a case of prolapsed cord, attended with a transverse abdominal presentation operating undoubtedly as the cause. He having failed in all the other methods, I placed the woman upon her knees, as suggested by Dr. T. G. Thomas, of New York, for replacing prolapsed cord, and very soon succeeded in getting the cord back; and when the woman had lain down upon her side, I was surprised and highly gratified to find that the *position*, together with the slight manipulation used in putting back the cord, had changed the abdominal into a perfectly natural head presentation. I then left, but learned from the doctor that the labor progressed favorably, terminating in due time.

I reflected upon the result of position in that case, and thought of it in connection with the anticipated trouble in

the case of the Scotch lady soon to be confined. But when summoned to attend her, having just returned from visiting a patient one hundred miles away, fatigued, at ten o'clock at night, I referred the husband to my friend Dr. Dox, already mentioned, adding that if there should be trouble I would go and see what could be done.

At two o'clock on the following morning he called me, saying there was "trouble," and that the doctor wished I would come. I went of course, and the doctor met me at the door, saying it was a "bad shoulder presentation;" and not knowing that she had consulted me, added that it was the "fourth case of the kind with her; that the three children had been lost; that we should have to turn and deliver, and as the child was large this would also be lost."

After a moment's reflection, I reminded him of the transverse abdominal presentation I had accidentally corrected for him a few weeks before, by position and the slight manipulation necessary for replacing the prolapsed cord; and suggested that possibly, by the *position* and proper manipulation, this presentation might be corrected and made natural also. He replied that it was "impossible to crowd up the shoulder," and he had no hope that it could thus be corrected, but very kindly allowed me to make the attempt. The patient, having heard our conversation and being very anxious to have a living child, making not the least objection to the slight inconvenience of kneeling upon the folded quilts, one of my hands pressing gently upon the projecting part of the abdomen, while the other, following the receding shoulder, entered with comparatively no resistance from the child or maternal parts, till the ends of my fingers gradually spread out, grasped the vertex, and by the aid of the external pressure of the other hand conducted it to the superior strait, in which it readily engaged with the first pain; when she was turned down upon her side, the grasp being retained till another pain made me sure it had engaged, so as not to glide away. The patient made no complaint, though the doctor cautioned me, in her hearing, not to "get it into a worse position," feeling entirely

incredulous as to any favorable result of my experiment. But he was no less gratified than I when he found that the presentation was perfectly natural, as I had assured him.

I left at about three o'clock in the morning, having been there but a short time, the whole being accomplished in a few minutes, except waiting for the pains—only from two to five, as nearly as I can remember. It is likely that the head would generally engage with the first pain were the hand removed immediately on laying the patient down, and before any pain occurs. The labor progressed favorably, and resulted in the birth of a fine live boy weighing ten pounds, at nine o'clock, six hours after I left, to the intense gratification of the parents, and the great satisfaction of the good doctor and myself.

I reported this case to the Ontario County Medical Society, of which I was a member; conversed with prominent obstetricians about it; published it, with my plan of treatment, in the Medical and Surgical Reporter, of Philadelphia, in the spring of 1867, which was copied entire into the Boston Medical and Surgical Journal, and from that into at least one large obstetrical work, as I noticed.

Being a delegate from this country to the International Medical Congress in Paris, in 1867, by the urgent request of the late Sir James Y. Simpson, of Edinburgh, who declared to me that it was "the best thought I ever had," adding that in this I was "ahead of them all," I wrote my Essay on Shoulder Presentations, setting forth my plan of treatment. I conversed also with the other prominent obstetricians of Great Britain and France about it. But as the proceedings of the Parisian International Medical Congress were not published, so far as I know, it is likely that my essay was not heard beyond the Congress itself, or if so to any considerable extent.

In the fall of 1867, Professor S. D. Gross referred to my plan of treatment, in his introductory at the Jefferson Medical College, as an American discovery and improvement of importance, complimenting me thereon; and as his address was published in pamphlet form, and distributed extensively

in this country and abroad, the attention of many was doubtless thus called to it here and elsewhere.

In the autumn of the same year, in answer to an inquiry that I made of Dr. Dwight, then obstetrician to the Lying-in Department of the Blockley Hospital at Philadelphia, as to how he managed shoulder presentations, he replied, "By the new method with entire success," referring, as I ascertained by further conversation, to my *position* treatment.

So the late Professor Dickson, of the Jefferson Medical College, expressed to me the belief that my method must be generally adopted. Similar opinions have been expressed to me by others of high standing in this country and abroad.

But learning of children sacrificed and mothers imperiled, by the old method of turning and delivery, I ventured to make an allusion to the perfect safety of position as a means of changing, by cephalic version, shoulder and other more transverse into natural presentations, with a synopsis of my plan of treatment, in the Medical Record, of October 25, 1875; and also a more brief reference to it in the Journal of Materia Medica for October, 1876; referring in this to a communication which I received, dated November 5, 1875, from Dr. Edward Warren-Bey, now of Paris, France, late Surgeon-General of the Khedive's Army, Egypt.

In this communication, Dr. Warren says: "I am familiar with your method of turning in shoulder presentations, and I consider it an invaluable contribution to medical science. It is not only the best thought you ever had"—[referring to what Sir James Y. Simpson had said]—"but one of the best thoughts of the century." . . "Alike in the interest of humanity and patriotism, I desire to bring it more prominently to the attention of the obstetricians of France. Please, therefore, be so good as to send me the article explaining it, which you prepared for Sir James Y. Simpson in 1867, so that I may make use of it, for the purposes indicated above."

Within the last four months I have also received letters of inquiry from the following medical gentlemen:

October 23, 1876, from Dr. Samuel Selden, of Norfolk, Virginia, stating that he "was most favorably impressed with the principle and practice," asking for further information, and adding that he had only the night before got, as a result of podalic version, a "dead child, and the mother that day threatened with peritonitis."

October 26, 1876, from Dr. H. O. Bates, of Millersburg, Iowa, calling for a "copy of my Essay on Shoulder Presentations."

October 30, 1876, from Dr. Thomas L. Walker, of Lynchburg, Virginia, saying that from what he had read of my treatment of shoulder presentation, he was "anxious to learn more;" and asking for a copy of my "Essay presented in 1867 to the International Medical Congress in Paris upon the management of shoulder presentations."

December 7, 1876, from Dr. R. H. G. Seymour, of Nechanitz, Texas, saying: "Appreciating the inconvenience and danger entailed on both mother and child, under the old system of turning, I hail with delight any plan that will tend to mitigate such inconvenience and danger;" and asking for further particulars as to my "plan of treating such cases." At a later date (December 19, 1876), after having received the particulars asked for, Dr. Seymour further writes me: "I am delighted with your method of treating shoulder presentations, as it appears to be so entirely without risk." He then expresses his determination of putting it in practice; and further predicts that the "anxiety attendant on shoulder presentations will become altogether a thing of the past, and the usually dangerous sequelæ avoided."

January 12, 1877, from Dr. A. J. Reese, of Mobile, Alabama, saying that he has been "favorably impressed" with my "method," and asking in regard to its availability in all "transverse presentations," etc.

I have also been informed that some reference was made to the fact that I had introduced a new method of treating shoulder presentations, by a foreigner, at the recent International Medical Congress in Philadelphia. I have not been ad-

vised as to the purport of such reference, or even by whom it was made, but infer, from what I saw in the Medical Record, that it may have been by Dr. Robert Barnes, of London. Of this, however, I am not certain; nor is it material, except in so far as it may indicate its more or less general acceptance abroad.

Finally, I notice in the American Practitioner of January, 1877, an article by Dr. Parvin on the "Genu-Pectoral Position in Shoulder Presentations." In this article he gives two illustrations and an intensely interesting account of his attempt, last October, "to convert the presentation of the shoulder into that of the head by the method of Dr. M. B. Wright." He says: "Failing in this after a few minutes' trial, the patient lying upon her back, and fearing possible rupture of the membranes if I persisted in my efforts when there seemed such resistance to the attempted change in the fetal position, I had the patient turn upon her knees and chest. Immediately after she assumed this position, I introduced two fingers into the vagina and up to the presenting part, preparatory to renewing the effort at cephalic version. To my surprise I found that the shoulder had already receded, moving upward and toward the right side of the false pelvis. Immediately taking advantage of what nature was evidently working towards the accomplishment of, I assisted, by gently pressing and pushing with the fingers, the ascent of the left shoulder, and within ten minutes had a presentation of the pelvis and feet, the sacrum being towards the right sacro-iliac symphysis. Shortly after the change of presentation, the membranes ruptured, and the patient resumed her former position upon the back, and in two hours more was delivered of a living child, weighing seven pounds and a half."

Dr. Parvin then very learnedly refers to the fact that the genu-pectoral position, in presentation of the body of the child, "was directed by Deventer in 1701;" by "Smellie half a century later;" by "Bard, the first American author of an obstetrical work; and by Shippen, the first American teacher of obstetrics." Then the Doctor *very justly* adds: "But all

these teachers looked upon this position as merely facilitating podalic version. To Dr. E. R. Maxson, of Syracuse, New York, is the credit to be given of showing that by the help of this position cephalic version may be performed."

In this case Dr. Parvin has illustrated the difficulty, if not the impossibility, of changing a shoulder presentation into that of the head, without the aid of position; and also that by position alone the shoulder may recede, and with very little digital aid "a presentation of the pelvis and feet" may be secured, a favorable result following. Had the learned Professor, however, thought it *necessary* in this case to interfere to the extent I have directed, for ordinary shoulder or more transverse cases of this character, and caused his patient to kneel upon folded quilts, so as to raise her hips still more, thus further elongating the abdominal cavity, putting the vagina upon the stretch, thereby giving it a cylindrical character, thus aiding to throw the head into a line with the superior strait; and instead of assisting with only two fingers, thus "gently pressing and pushing" with them to aid in the "ascent of the shoulder," as he states, he had passed one hand, well oiled, as may be safely and easily done in this position, gradually spreading out the fingers as I have directed and grasping the head, pressure by the other hand externally aiding, he could doubtless have had a head presentation instead of that of "the pelvis and feet." This however, as he undoubtedly wisely judged it would, answered well in his case, but might have proved fatal to the child had it weighed—instead of seven and a half—ten pounds, as in my first case to which I have referred. Too little interference by the obstetrician, however, is better than too much as a rule.

*Conclusion.*—In conclusion I may be allowed to add that I believe all—with the late Sir James Y. Simpson and Professor Parvin—admit that I was "ahead in this," the thought having originated with me as I have stated; that the principle is sound and the procedure entirely void of danger to mother or child, being scarcely an inconvenience; that it is so easy of execution any competent obstetrician may avail himself of its

advantages without fear; that it has been, so far as known, and therefore is likely to continue to be, successful in every case in which it has been or may be hereafter understandingly put in practice, where the capacity of the pelvis will admit of delivery under any circumstances.

Finally, let us hope that a long established usage may not prevent any one from adopting instead a method at once so simple, easy, and common sense; and that in putting it in practice *such* and *only such* necessary interference may be resorted to, as has been shown to be requisite to secure the desired result, thus saving from unnecessary peril the fond *mother* and her darling *child*.

208 MADISON STREET, SYRACUSE, N. Y.

## OPERATIONS FOR STRANGULATED HERNIA.*

BY GRAHAM N. FITCH, M. D.

For strangulated inguinal hernia, I have operated in twenty-two cases. Seventeen were males; five females. Three were irreducible; one congenital (three or four years of age); four were scrotal. In two the stricture was in the neck of the sac. In two (enteroëpiploceles), the protruding omentum was gangrenous, the intestine not; the gangrenous portion was cut off. In one this portion was small; in the other considerable, and two arterial branches were divided. One was tied, and the ligature left hanging from the upper angle of the wound; the other was twisted, and the wounds left partially open for near half an hour. No troublesome hemorrhage or other symptom supervened.

In one of the twenty-two cases an inguinal tumor covered part of the hernial protrusion. After the first incisions the tumor interfered with the farther progress of the operation, and was dissected out. In its lower third it was adherent to

* Synopsis of lecture delivered at the College of Physicians and Surgeons of Indiana.

the sac for a space equal to a thumb-nail. It was left adherent, and that part of the sac taken out with the tumor. The latter had probably been originally an inguinal gland, but the pressure and irritation produced by attempts upon the part of the patient to keep the hernia reduced had so changed its appearance as to render its structure doubtful.

In six of the twenty-two cases—one of which was published in the second volume of the Indiana and Illinois Medical and Surgical Journal—I tried Richter's plan of radical cure by scarifying the ring after division of the stricture. In the first and third of the six the effort appeared to be successful, but failed in the other four. None were fatal, but the subsequent inflammation was so severe further attempts of the kind were abandoned; of the twenty-two cases five were fatal, four males.

For femoral hernia, my operations have been fourteen; twelve females, two males. In two females the intestine was gangrenous. In one of the two, after division of the stricture, the intestine was permitted to spontaneously return; it resulted fatally. In the other it was fastened to the edges of the external wound, and a fecal fistula resulted, which was cured some months afterward. In one there were probably two strictures; the sac was not divided, but a stricture found outside of it and relieved. The sac then returned; but the symptoms not being relieved, the existence of another stricture at the neck of the sac was suspected. The sac was then sought through the wound, but unsuccessfully. Termination fatal. Of the fourteen cases four were fatal; one male.

For umbilical hernia I have operated once. The patient was a female. The operation was successful, and followed by no unusually unpleasant symptoms.

I attribute the fatal cases not to the operation, but to the delay in its performance; and look back with regret to a number of cases in which life was permitted to be lost by too long continuance of efforts at relief by other means than the knife. The operation is less frequently required since the introduction of chloroform; I deem it, as an aid to taxis, more valuable than all means previously used.

LOGANSPORT, IND.

# REMEDY FOR HEADACHE.

BY JOHN E. LOCKRIDGE, M. D.

Common, idiopathic headache—that is, headache not a symptom of any other disease, as fever, sore throat, small-pox, etc.—comes as near being an *opprobrium medici* as any other common and ordinarily innocuous complaint in the catalogue. I say ordinarily innocent as to grave results; yet this is not always the case, for I have seen an ordinary nervous headache develop into congestion and inflammation of the brain, and require the most prompt and energetic treatment to prevent fatal results.

However, the complaint of which I wish to say a word is one in which there is supposed to be no danger whatever; it is the so-called sick-headache, or neuralgic headache, or nervous headache—all of which are synonymous terms. Yet I will probably never forget the case of an intelligent and interesting young lady, who complained to me that she was then suffering from all of these forms at one and the same time; and indeed she pointed out to me, with anatomical precision, the exact portion of the cranium where each one was domiciled. She viewed me with utter incredulity, when I had the temerity to inform her that they were all one and the same complaint.

Although it is nothing but "a headache," yet I have seen poor creatures suffer almost indescribable anguish for hours, yea, even for days at a time; and when relief finally came, it was only for a period, for *in a month*, or on the occasion of some trivial excitement, or imprudence of diet, exercise or regimen, or perhaps as often without any known or appreciable cause, she would suffer from a recurrence of the complaint. I dare say that there is not a physician of experience but can recur to numerous occasions when he was appealed to for some remedy to relieve these cases of nervous headache,

and who has been at a loss to find some remedy that he could recommend with a reasonable degree of certainty, save such a drug as morphia or something of the kind, the after-effects of which would produce sickness of the stomach or loss of appetite for a time, or temporary confinement of the sufferer to her bed. I have thus far spoken as if the complaint was confined to the female sex; but whilst this is true to the extent of perhaps nine cases out of every ten, yet I have seen men suffer very severely from the same affection.

Many times have I been discouraged as well as worried with these cases. "Pain in my head," is the cry! Sometimes over the brow, sometimes through the temples or in the back of the head, or the whole head aches. Light and noise aggravate it; the room must be darkened and every one must walk noiselessly, suffering almost as much as the patient. Sometimes the head is hot; generally, I believe, there is no unnatural heat, except perhaps in the case of gentlemen who have spent a late evening over an extra glass of wine, or who have overtaxed their brains from a press of business. Sometimes there is nausea, attended or not with a slight coating on the tongue; just as often there is no nausea or other appreciable derangement of the digestive apparatus.

Now come the perplexity and discouragement. We enjoin quietude and the exclusion of light and sound; we make cold or warm applications to the head as the case may be, and use the hot foot-bath and mustard-plasters to the nucha or temples; we give antacids, or indulge the patient with acids, as oranges, lemons, etc.; we try aromatic spirits of ammonia, lavender, valerianate of ammonia, compound spirits of ether, separately or combined; in short, we go through the whole list of the so-called nervines, antispasmodics and corrigents; but in spite of all, the headache pursues its own course in a vast majority of cases.

But now for my remedy. Having observed that bromide of potassium, in twenty or thirty grain doses, and tincture of aconite root, separately, relieved more cases than any remedies I had previously exhibited, I experimented with large

doses of the drugs combined. For several years I have been in the habit of giving in these cases sixty grains of the bromide of potassium and ten drops of the tincture of aconite root, in a wineglassful of water; the same to be repeated in an hour or two, if the head be not relieved; but a repetition of the dose is very seldom required. In the case of ladies and others who wish to have the remedy always at hand, or who are about to start on a journey, I supply them with the following mixture:

℞. Bromide of potassium, . . . . ℥ ij.
Tincture of aconite root, . . . ℥ j.
Distilled water, } . . . . āā ℥ ij.
Simple syrup, }

M. S. Take a dessertspoonful in some water every hour, until relieved.

My recipe may smack of empiricism in appearing as a panacea for every variety of headache, let the cause be what it may and the accompanying symptoms be what they will; but I am willing for it to rest under the soft impeachment, if indeed it relieves promptly only a moiety of these distressing cases. I will not now attempt to give the *rationale* of this seeming paradox, or the *modus operandi* of the cure, but will simply remind my readers that this nervous headache is a paradoxical, capricious, discouraging, and worrying affection.

In conclusion, I assure my readers that I claim no new discovery, for these remedies have been used in these cases by others; nor do I claim that there is any charm in the exact dose of these drugs that I prescribe; but I do insist that less than a drachm, of the bromide at least, is wholly insufficient. And furthermore I will say that, if I am not fully warranted in guaranteeing that the recipe will relieve every case, I can confidently say that the remedy is entirely satisfactory to me in its effects, which is more than I can affirm of any other remedy, or combination of drugs, that I have ever exhibited.

INDIANAPOLIS.

# THE SETON IN PARALYSIS AND EPILEPSY.*

BY THOMAS J. GRIFFITHS, M. D.

*Surgeon United States Marine Hospital Service.*

Since 1870 eighteen cases of paralysis and five of epilepsy have been treated in the United States Marine Hospital at Louisville, Ky., by the seton introduced in the back of the neck. In one case only, that of Christopher Darr, admitted in June, 1870, did the seton fail to benefit. He died while under treatment, two months after admission. Of the remaining seventeen cases, ten recovered and the others were much benefited. I have present knowledge of eight of the ten who recovered, and they have had no return of their former disease. In the seven men who were discharged improved the paralysis was noticeable in their walk, but they were able to go about and perform a considerable amount of light work.

Only one of the five cases of epilepsy which were treated received no benefit. In the cases of paralysis no treatment except the seton and tonics was employed. Bromide of potassium was given in one of the cases of epilepsy. All of them received tonics. Since 1870 I have treated eight cases of paralysis (hemiplegia) in private practice by the seton with the most gratifying results; six recovered and two improved. The following is a detailed account of the cases treated in hospital:

1. E. McD., fireman, age 27; admitted June 1, 1870, with hemiplegia of right side; seton introduced June 2; he was discharged December 7, 1870, much improved. This patient was brought to the hospital in a wagon and had to be carried to the ward on a stretcher, and when discharged walked away carrying his baggage with him.

* This paper is from advance sheets of the Surgeon General's report, which is expected to appear shortly.

2. C. D., fireman, age 26; was admitted June, 1870; seton introduced in back of neck on day after admission. No improvement followed; he died August 16.

3. A. C., deck-hand, age 22; admitted December 12, 1870; seton introduced on 13th; he was discharged March 4, 1871, improved.

4. J. B., fireman, age 36; hemiplegia of left side; admitted November 2, 1870; discharged March 4, 1871; complete recovery.

5. J. G., fireman, age 19; hemiplegia of left side; was admitted November 17, 1870; seton introduced November 20; he was discharged March 4, 1871, recovered.

6. L. T., fireman, age 22; admitted to hospital January 3, 1871, with hemiplegia affecting right side; discharged, much improved, January 17, 1872, and has since, I understand, entirely recovered.

7. W. H., fireman, age 43; admitted November 21, 1871, and discharged June 16, 1872, improved.

8. W. D., fireman, age 25; came to hospital October 26, 1871, with hemiplegia, right side; recovered and discharged September 16, 1872.

9. J. R., fireman, age 48; admitted April 16, 1872, suffering with hemiplegia, left side; recovered and discharged November 1, 1872.

10. W. H., deck-hand, age 18; was admitted May 30, 1872, in an unconscious condition, suffering with what was then supposed to be typhoid fever. Two days after his admission he was discovered to have complete paralysis of right side, with aphasia. He remained under treatment nearly one year, at the end of which time the paralysis, with the exception of the aphasia, had completely disappeared. He has since been doing good service as a farm-hand, and no one could tell from his actions that paralysis ever existed. The aphasia still persists.

11. J. L., fireman, 28 years of age, had hemiplegia of left side; was admitted June 6, 1872, and discharged January 30, 1873. He recovered, and is now a fireman on the river.

12. T. McC., deck-hand, age 30; admitted October 24, 1872, with hemiplegia affecting left side; was discharged, improved, February 14, 1873.

13. A. M., fireman, age 51; came into hospital April 30, 1873, with hemiplegia of right side. Having recovered, he was discharged August 27, 1873.

14. D. S., fireman, age 51; had hemiplegia of right side; was admitted October 27, 1873, and discharged, improved, July 28, 1874.

15. W. P., fireman, age 29; admitted November 28, 1873, with hemiplegia of left side. He was discharged April 3, 1874, having recovered.

16. J. F., fireman, age 28; was admitted to hospital, suffering with iritis, on May 11, 1873, and was soon afterward attacked with hemiplegia of right side. A seton was introduced in back of neck June 3. He had completely recovered from the paralysis by December 29, 1873. The iritis, which had existed for several weeks preceding his admission to the hospital, was an aggravated case. Adhesions had occurred between the iris and the cornea. There was also great opacity of the cornea following conjunctivitis. Iridectomy was performed in January, 1874, without success. He was sent to his friends in New York in April, 1874, almost totally blind.

17. E. V., deck-hand, age 27; was admitted June 15, 1873, with paraplegia. A seton was introduced at back of neck and two in lumbar region. He recovered, and was discharged, April 3, 1874.

18. M. S., fireman, age 40; hemiplegia of right side; was admitted July 29, 1875; he is still under treatment, and has improved very much. A peculiarity in this case, when admitted, was the frequent and painful erections which occurred, without sexual desire. This rapidly disappeared as the paralysis improved.

*Cases Treated in Private Practice.*

1. D. J. G., physician, age 44; was affected with hemiplegia of left side June 12, 1867; seton gave marked relief for

the first three months, when softening of brain supervened, and all of his symptoms became rapidly worse. He is now a confirmed invalid.

2. Rev. Father McN., priest, age 60, chaplain to the Sisters of Charity at the hospital; was attacked with hemiplegia of right side April 9, 1872, while on duty at the hospital; seton was introduced April 10. He made a complete recovery, and is now chaplain of St. Xavier's Institute, in this city. He is subject to occasional slight attacks of vertigo.

3. A. R., merchant, age 49; attacked with hemiplegia of left side January 6, 1873; he was treated nine months, and at the end of that time had so much improved as to be able to walk about and attend to his business.

4. J. C., farmer, age 47; was attacked with hemiplegia of right side April 29, 1873, and recovered.

5. Mrs. L. T., washerwoman, aged 49; attacked with hemiplegia of left side June 30, 1874; recovered in twelve months.

6. N. D., tanner, age 28; attacked July, 1874, with hemiplegia of right side; recovered in eight months.

7. H. F., milk-man, age 23; first attacked November 25, 1874, with hemiplegia of right side; recovered in six months.

8. F. M., carpenter, age 35; was attacked January 1, 1875, with hemiplegia of left side; recovered in nine months.

In order to present these cases in a more condensed form, the following tables are submitted. The cases of epilepsy reported are those treated by the seton only, (except the fifth, which was treated with the seton for three months without benefit, when bromide of potassium was administered in thirty grain doses three times daily, and strychnia was subsequently added, but no relief given.)

*Cases of Epilepsy treated in Hospital by use of the Seton.*

| No. | Name. | Age. | Occupation. | Admitted. | Discharged. | Disease | Result. |
|---|---|---|---|---|---|---|---|
| 1 | J. B ..... | 24 | Fireman ..... | Aug. 13, 1873 | Sept. 25, 1873 | Epilepsy .... | Improved. |
| 2 | D R ..... | 29 | Deck-hand ... | June 6, 1872 | Dec. 1, 1872 | Epilepsy .... | Recovered. |
| 3 | M. M..... | 26 | Deck-hand ... | June 6, 1874 | Aug. 4, 1874 | Epilepsy .... | Improved. |
| 4 | J. F..... | 29 | Deck-hand ... | Nov. 10, 1872 | Apr. 10, 1873 | Epilepsy .... | Recovered. |
| 5 | B. C..... | 50 | Deck-hand ... | April —, 1874 | Oct. 5, 1874 | Epilepsy ... | Not imp'd. |

*Cases of Paralysis treated in Hospital by use of the Seton.*

| No. | Name. | Age. | Occupation. | Disease. | Admitted. | Discharged. | Result. |
|---|---|---|---|---|---|---|---|
| 1 | E. McD..... | 27 | Fireman ..... | Hemiplegia, right side. | June 1, 1870 | Dec. 7, 1870 | Improved. |
| 2 | C. D..... | 26 | Fireman ..... | Hemiplegia, left side. | June 18, 1870 | Aug 16, 1870 | Died. |
| 3 | A. C ..... | 22 | Deck-hand ... | Hemiplegia, left side. | Dec. 12, 1870 | Mar. 4, 1871 | Improved. |
| 4 | J. B..... | 36 | Fireman ..... | Hemiplegia, left side. | Nov. 2, 1870 | Mar. 4, 1871 | Recovered. |
| 5 | J. G..... | 19 | Fireman ..... | Hemiplegia, left side. | Nov. 17, 1870 | Mar. 4, 1871 | Recovered. |
| 6 | L. T ..... | 22 | Fireman ..... | Hemiplegia, right side. | Jan. 3, 1871 | Jan. 17, 1872 | Recovered. |
| 7 | W. H..... | 43 | Fireman ..... | Hemiplegia, left side. | Nov. 21, 1871 | June 16,1872 | Improved. |
| 8 | W. D..... | 35 | Fireman ..... | Hemiplegia, right side. | Oct. 26, 1871 | Sept. 16,1872 | Recovered. |
| 9 | J. R..... | 48 | Fireman ..... | Hemiplegia, left side. | Apr. 16, 1872 | Nov. 1, 1872 | Recovered. |
| 10 | W. H..... | 18 | Deck-hand ... | Hemiplegia, right side. | May 30, 1872 | Apr. 23, 1873 | Recovered. |
| 11 | J. L..... | 28 | Fireman ..... | Hemiplegia, left side. | June 6, 1872 | Jan. 30, 1873 | Recovered. |
| 12 | T. McC ..... | 30 | Deck-hand ... | Hemiplegia, left side. | Oct. 24, 1872 | Feb. 14, 1873 | Improved. |
| 13 | A. M..... | 34 | Fireman ..... | Hemiplegia, right side. | Apr. 30, 1873 | Aug 27, 1873 | Recovered. |
| 14 | D. S..... | 51 | Fireman ..... | Hemiplegia, right side. | Oct. 27, 1873 | July 28, 1874 | Improved. |
| 15 | W. P..... | 29 | Fireman ..... | Hemiplegia, left side. | Nov. 28, 1873 | July 6, 1874 | Recovered. |
| 16 | J. F..... | 28 | Fireman ..... | Hemiplegia, right side. | May 11, 1873 | Apr. 3, 1874 | Recovered. |
| 17 | E. V ..... | 27 | Deck-hand ... | Hemiplegia, left side. | June 15, 1873 | Apr. 3, 1874 | Improved. |
| 18 | M. S ..... | 40 | Fireman ..... | Hemiplegia, right side. | July 29, 1875 | ..... ..... | Under treatment. |

*Cases of Paralysis treated in Private Practice by use of the Seton.*

| No. | Name. | Age. | Occupation. | Date of attack. | Length of time under treatment. | Disease. | Result. |
|---|---|---|---|---|---|---|---|
| 1 | D J. G. ..... | 44 | Physician .... | June 12, 1867 | 3 months... | Hemiplegia, left side. | Imp'd; softening brain followed. |
| 2 | Father McN | 60 | Priest ..... | April 9, 1872 | 8 months... | Hemiplegia, right side. | Recovered. |
| 3 | A. R..... | 49 | Merchant .... | Jan. 6, 1873 | 9 months... | Hemiplegia, left side | Great improvement. |
| 4 | J. C..... | 47 | Farmer ..... | April 9, 1873 | 11 months.. | Hemiplegia, right side | Recovered. |
| 5 | L. T ..... | 38 | Washwoman | June 30, 1874 | 12 months.. | Hemiplegia, left side. | Recovered. |
| 6 | N. D ..... | 28 | Farmer ..... | July 30, 1874 | 8 months.. | Hemiplegia, right side. | Recovered. |
| 7 | H. F ..... | 23 | Milkman..... | Nov 25, 1874 | 6 months... | Hemiplegia, right side. | Recovered. |
| 8 | F. M..... | 35 | Carpenter..... | Jan. 1, 1875 | 9 months... | Hemiplegia, left side | Recovered. |

My practice in cases of paralysis before the date mentioned (1870), was to follow the usual routine of treatment by electricity, strychnia, iodide of potassium, etc. I have no record of the cases treated in the earlier days of my practice by these methods, but I am certain no such results were realized as have been obtained by the use of the seton. I do not remember a single case of complete recovery in any of the cases treated by my earlier plan. I have long since abandoned the use of electricity and strychnia as remedial agents in paralysis.

When the paralysis is due to the presence of a tumor, embolism, extravasation of blood, or exudation of lymph, I believe iodide of potassium would be beneficial, though the results given by the seton have been so gratifying that I rely on little else. Symptoms, such as constipation (which nearly always exists), diarrhœa, debility, anæmia, etc., are treated as occasion demands. The mental faculties, which are usually disturbed in cases of hemiplegia, rapidly improve under the seton. I always introduce a large seton, fifteen to twenty strands of silk or flax thread, and allow it to remain for months, if necessary, removing only when the patient seems to be permanently improved or has recovered, unless too great irritation be produced by the presence of the seton, when it is removed temporarily to allow the irritation to subside.

I wish to call attention to the fact that fourteen of the eighteen cases treated in hospital were firemen—a circumstance which will not surprise those who are familiar with statistics on this subject.

I have used the seton with good results in the treatment of obstinate cases of iritis, whether syphilitic, rheumatic, or from other causes. Chronic cases, which seem to improve slowly or not at all under ordinary treatment, often show marked improvement a few days after the introduction of a seton.

United States Marine Hospital, Louisville, Ky.

# ARE BACTERIA NORMAL?*

BY J. GARDNER, M. D.

The subject of the present paper, to which I invite your attention, is, "Are bacteria normal?" The question is many-sided. How normal?—Normal to what? The answer must apply to the particular case instanced. If you ask, are bacteria normal to living animal or vegetable tissues, the answer must necessarily be negative; for if present at all, they are intruders, sometimes harmless, but often mischief-makers in the vital tissues. Bacteria belong to the fungoid or algoid forms of vegetation. Formerly all organized bodies, possessing locomotive powers, were classed as animalcules; but later and more accurate investigations have shown that motion is no criterion, for in numerous instances where the complete life history of plants is recorded, we find that well-marked contractility is present at some period. "Out of nothing, nothing was made," is a very ancient saying; it is as wise as old. Yet there are those to-day who gravely tell us that spontaneous generation is a fixed fact—a fact established beyond a reasonable doubt. We have objections to offer.

Until recently very small bodies immersed in fluids, or so arranged as to transmit light, were entirely too infinitesimal to reveal themselves at all to the magnifiers in use. But the late improvements in high powers of wide angular aperture, have made the descending steps toward the infinitely little, gradually show themselves clearer and still clearer, until we are confident that we have come to a stage where the size of these organized bodies meets with no more obstacle in passing through living animal tissues than flour does in passing through the meshes of a sieve.

Do not understand me to say that the fiftieth or seventy-fifth inch objective has taken us to that border-land, that "brink of dreary nothing," whither the nethermost limit of life is brought in range. Not so. As fresh depths of vision

* Read before the Mitchell District Medical Society at Bloomington, Ind., February 15, 1877.

are attained, new objects of lesser size present themselves; and we are compelled to acknowledge to ourselves that there is still the unattainable, bidding defiance to our grasp and eluding the most patient scrutiny. Suppose now we should magnify an elephant with the same degree of amplitude that we use to bring some of these minute things in view. He would appear to us as being over ten miles long.

How, then, do we dare assert that we know the complete life history of these minute organisms? How dare we assert that we have seen them spontaneously generated by the transformation of some dead tissue? Some of them are seen so small that a whole colony of them might ride through the whole circulatory track of a mammalian vertebrate on a single blood disk, and no overloading either.

I show you here some bacteria and vibriones in some putrid wine. While you see some of the bacteria in motion, you also see the vermicular-shaped vibriones waltzing about in the most jocular manner. When subjected to a higher degree of amplification, these vibriones are shown to be aggregations of bead-like bodies into strings, which, by a vibratory and rotatory movement, possess the power of progression in a lively degree. Vibriones and bacteria are nearly always associated in the same fluids; and should they prove to be the same organisms in different life-stages, it need not excite any surprise. Some of the common mold that attacks vegetables as they commence to decay, bears a resemblance, in the way its cells are strung together, to the growth of vibriones.

If we admit a ray of sunlight into a darkened room, we see that a shining track is marked on the hitherto invisible motes that float in the air. Should we take the pains to collect some of these on a glass slide, as is quite easily done, the most heterogeneous things will be found present. Particles of wool, bits of feather, wood, hair, and various other substances; and besides all these, if you add to what you have collected a carefully boiled vegetable or animal infusion—boiled to kill any existing germ—it will not be long, if the temperature is not too low, until you find vibriones and bacteria have appeared. As before stated, these organisms are

so small and light that they float in the atmosphere, wafted about by every breeze; and though inconceivable numbers of them perish without ever having met a suitable location to vegetate and increase, not a few do meet with all the essential conditions, and when this happens, in connection with certain at present unknown morbid conditions of the animal body, serious diseases result.

Bacteria are not normal to the human body. Neither its fluids nor its solids are in any way benefited by their presence. Though much more frequently to be found as a parasite in health than the majority of people imagine—for the reason that the system is able to resist any encroachments on the integrity of the tissues to which they are attached—bacteria and their kindred dermatophytes are not slow to avail themselves of any disorder in nutrition, or any lowering of the vital processes, to increase to a marvelous extent, and appropriate to themselves the epithelium of the location or organ upon which they may be located. In this event a denudation of the mucous membrane of its protective covering by the too early exfoliation of the epithelium, and inflammation and suppuration ensues. To one familiar with the ease with which leucocytes migrate through the tissues of the living body, it is not astonishing to conceive that enormous numbers of leucocytes should pass out at the irritated surfaces denuded of their normal covering, and that in the form of pus, in which swarms of bacteria and vibriones incubate, the healthy surfaces with which this ichorous pus comes in contact, should become abraded and excoriated, and secondary cutaneous lesions should ensue.

With many observers it is still a matter of uncertainty to what precise extent bacteria and other kindred parasites influence the spread of disease, nor is it settled with them whether they are the essential exciting cause of such diseases as puerperal peritonitis and metritis, or only the carriers of another *tertium quid*, which works these disasters. That bacteria, or some form of motile parasites, are always present in these diseases, is tolerably well established; and just what their malign influence embraces, whether it resides within or whether

they are the carriers of it, I am not prepared to say with certainty; but I can easily persuade myself, in view of the success of antiseptic surgery, that bacteria are inherently inimical to health.

Histologists are divided as to the exact structure of the membrane of diphtheritic exudations. That some form of vegetable parasite is always present is established beyond a reasonable doubt; and when we consider the extremely small size of these bodies when in a germinal state, we might very justly look for them to pervade the whole body, to fill all its fluids and penetrate all its soft tissues. In such case, a blistered surface would give them the necessary moisture, and contact with the atmosphere the other conditions essential to growth, and a true diphtherite would ensue, as is frequently seen during the prevalence of epidemics of that disease.

Some observers have classed puerperal fever as a uterine and peritoneal diphtheritis; and certainly they have shown, in the presence of the characteristic false membrane, that their position is not assumed without some show of reason.

The germ theory of zymotic diseases is an old one, but until late years the world lacked means of verification; and now in the achromatic high power objective, we may reasonably hope that, by a long and patient search into the essential nature of such cases, we may arrive at absolute truth.

In a well written monograph by Dr. J. Mead Edwards, of Newark, N. J., which has been placed in my hands since commencing this paper, I find that the general position that I have assumed has been fully sustained, both in his own experience and by numerous authorities cited by him; and though Beale is doubtful of fungoid vegetation having any agency in the production of the pseudo-membrane of diphtheria, and Rindfleisch is of the opinion that the production of this membrane is purely an example of hyperproliferation of immature epithelial cells from normal germinal matter, yet both conclusions are so unsatisfactory that we are impressed that they are wide of the fact. Putrefaction never takes place, and decay never visits organic bodies, but by the intervention of living things; and it is likely that putrefaction would be

utterly unknown, but for the presence of the lower forms of vegetable and animal life. To be sure, they in some sense are nature's scavengers, and they clear away the *débris* of former existences now dead, and prevent such cumbersome accumulations as must ensue if all the plants, trees and animals that have lived on the earth, were left subject to the wasting away of the elements alone.

Nothing is better established in pathology than the dependence of numerous varieties of skin and hair diseases on parasitic vegetations. All of these are referable to modifications of the yeast torula, so far as appearances go, and are generically named by Dr. Tilbury Fox trichophyton. Thus the trichophyton tonsurans is the essential element in that loathsome and almost ineradicable disease, *barber's itch*. In this disease, the isolated cells do not appear very different from bacteria; and it is no violence to my sense of analogy to believe that the same primitive spores are only governed by external circumstances, as locality, moisture, character of excretion, etc., to determine what exact specific variety shall present itself. Dr. J. Mead Edwards is confident that he has seen the ordinary bacteria that appeared in suppuration, in connection with the breaking down of vaginal epithelium, going through the same stages as that of yeast torulæ, and that he has actually witnessed the formation of sporules as the yeast plant produces them under favorable influences. In chloasma, the peculiar purple color is imparted to the skin by the deep burrowing fungous vegetation; and examples of persons becoming inoculated by contact and contracting tinea and other cutaneous disorders, are too well established to require proof.

Bacteria are not normal to the human body, but are probably tolerated by vigorous health; but when from any cause the vitality is lowered, they spring into a more rapid reproduction, and ulcerations and other inflammatory phenomena are produced. Carbolic, sulphurous and salicylic acids, the bromides and permanganate of potash, all seem to be inimical, as does also arsenic, to the life of these bodies. The insecta seem to be troubled with these vegetable parasites to a greater

extent than man. The domestic fly and the silkworm are the victims of an aspergillium growth that sucks from them their juices and robs them of their nutrition, and at the same time clogs up the spiracles through which respiration is carried on, until the fly or worm, as the case may be, is at last compelled to succumb to the minute but vigorous robber. If you will take the pains to examine, with a moderate power magnifier, a few of the flies you find dead about your windows, you will find the spiracles that communicate with their tracheæ are clogged full of these low forms of fungi.

The aphthæ of badly nourished and sickly children are directly referable to some one of the forms of fungi that have been alluded to, just as many of the discharges of a leucorrhœal character are clearly dependent on the same cause. There is no soft tissue, and no fluid of the body, that, under favoring circumstances, may not form the habitat of bacteria; and the kidneys, lungs, ovaries, and in fact all of the solid viscera, have been found invaded by them.

In the fungoid and algoid branches of botany there is a wide field remaining to be investigated, and all I can hope to have accomplished by my paper is to draw attention to their importance, and to impress on the younger members of the profession the fact that the amount of our exact knowledge is in very small proportion to the vast unknown. Until we work out the life problem of these minute bodies, trace their transformations, and find to what extent they are governed in their metamorphoses by the circumstances of their environments, we will only be able to give them provisional places in genera and species. That some of them are the essential agents in fermentation is now certainly known, as the yeast plant has established; and that putrefactive fermentation is dependent on bacteria, is equally true. But under just what circumstances they become privileged to work disaster in the human system, and finding this out, the discovery of a method for their extermination is the province of enlightened pathology and therapeutics.

BEDFORD, IND.

# Reviews.

**Cyclopædia of the Practice of Medicine.** Edited by Dr. H. Von Ziemssen. Vol. VII. New York: William Wood & Co. 1876.

This volume of the Cyclopædia is one of the largest yet issued, and in our judgment is the most interesting. Without the copious index it contains one thousand and twenty-five pages, devoted to diseases of the chylopoëtic system, with those of the naso-pharyngeal cavity and pharynx, and the larynx.

The affections of the naso-pharyngeal cavity and pharynx, forming the first one hundred and eight pages of the volume, are treated of by Dr. Herman Wendt, who died a little more than a year ago, a young man, just as he had begun to demonstrate what powers he possessed for scientific investigation.

Dr. Leube is author of the dissertation on the diseases of the stomach and intestines, making a paper of three hundred and sixty-three pages.

Dr. Leichtenstern writes the article on constrictions, occlusions, and displacements of the intestines. He devotes unusual, but we think not undue, space to habitual constipation. It was a remark of our countryman, Godman, that "the curse of constipation had driven thousands to madness." Exceeding discomfort certainly is occasioned by it, even where no more serious evils arise. It sustains a close relation to hypochondria, a very serious disorder, and is incompatible with clearness and serenity of mind. Among the causes assigned for it by Dr. Leichtenstern is deficiency of water as a diluent, especially in hot weather when so much is exhaled from the skin.

We are convinced from long observation and experience that in very many cases the most available remedy for consti-

pation is water, taken freely in the morning on an empty stomach. A little table-salt makes it more agreeable to the taste, and at the same time heightens its efficiency. Two or three tumblers of water, with a pinch of table-salt in each, drank before breakfast, will in most costive persons act as a mild laxative, effectually unloading the lower bowel, without griping or uneasiness. Among the consequences of constipation are hemorrhoids, and we have found no remedy for these tumors so effectual as keeping the bowels open by this saline draught.

Of the cases that come to the physician few are more irksome or trying to his patience than those of young men connected with the sexual function, in which the mind has been alarmed by reading the books of quacks. Every form of nervous derangement is traced by these vile works to spermatorrhœa; and these patients are generally subjects of constipation. For this condition the free use of cold water in the form mentioned will be found salutary.

The next article treats of intestinal parasites. It abounds in curious matter, much of which is practical. These parasites, while they occupy a less prominent place in etiology than they once did, have acquired more importance in pathology as connected with morbid states which for a long time were not understood. The mischief done by them in the intestinal canal has been greatly exaggerated, but it is now known that they are at the bottom of certain obscure affections of the gravest character. They have been investigated with the greatest care in our times, and no longer furnish arguments for the doctrine of spontaneous generation. Like animals of a higher organization, the several species have their favorite climates. One tapeworm is peculiar to certain countries in Europe, and another species is found among a different people. If generated within the body, it would be difficult to explain why the alimentary canal of the Russian develops one tænia, and that of the German another. But this is not the point in regard to these parasites which especially interests us as practitioners. The practical observation is, that they are

taken into the stomach at some stage of their development with our food or drink, as eggs or embryos; and that we are to avoid their introduction by cleanliness and care in preparing our food. Perfect cookery is the great anthelmintic. The eggs of all these worms are killed by a high temperature. If we would escape all danger from tbem, we must cook our meats and vegetables thoroughly. But these eggs may also become attached to the hands and get under the finger-nails, and hence the oriental custom of washing the hands before every meal is, as remarked by Dr. Heller, "deserving of more general adoption among us."

Von Ziemssen, the editor, writes the article on laryngitis and the other affections of the larynx. The closing article, on spasm of the glottis, is written by Dr. A. Steffen. The index occupies nearly twenty pages, and adds much to the completeness of the volume.

We have so often expressed a favorable estimation of this work that we need hardly add a word more of commendation by way of calling to it the attention of our readers. Whatever may be the shortcomings or defects that a severe criticism might discover in it, we are confident of the opinion formed of it after an examination of the first volumes, that few more valuable works have been contributed to practical medicine during the present generation. The American editors and publishers have discharged their duty toward it fully in presenting it in a dress, both as to translation and mechanical execution, every way so graceful and attractive. Its style is as purely English as it could well be in a translation from the German; and the paper, printing and woodcuts are excellent.

L. P. Y.

---

**Annual Report of the Central Kentucky Lunatic Asylum.**

A little more than fifty years ago, the first lunatic asylum in Kentucky was thrown open to the insane of the common-

wealth at Lexington. Now the state has three institutions for lunatics, while its population has not greatly increased. This shows, first, an increase of lunatics in proportion to the population; and, second, that the state is taking better care of these unfortunates. Dr. Forbes, the medical superintendent, has made here an interesting report.

---

**Notes on the Burning of Theaters and Public Halls.** By J. M. TONER, M. D.

If we have a writer among us of whom it can be truly affirmed that his pen is busy *de omnibus rebus, et quibusdam aliis*, it is our learned friend Toner, at Washington. The terrible conflagration at Brooklyn has brought him out on the question of how the sacrifice of human life may be avoided in the burning of theaters. His historical compilation is something marvelous, and he will be accounted one of the benefactors of the human race if he can point to a method by which theaters and public halls may be effectually protected against fire.

---

**Chemistry, General, Medical and Pharmaceutical**—including the Chemistry of the U. S. Pharmacopœia. By JOHN ATTFIELD, Ph. D., F. C. S. Seventh edition. Philadelphia: Henry C. Lea.

This is a revision from the sixth English edition of this excellent text-book, which gives the laws and principles of general chemistry, by applying them directly to the details, that are particularly interesting to the pharmacist and practitioner. The author has wisely adopted the plan of elucidating the principles and laws of the science, which is unfortunately notably neglected in most scientific works, viz., by showing the relationship and effects of these laws upon materials which exist in abundance about us, and are of some practical value. It is a valuable work for the busy practitioner, excluding as it

does everything that would be of interest only to the scientific chemist, and having a comprehensive index which renders after consultation easy.

That portion devoted to urinalysis and practical toxicology, and the tests for impurities in medicinal preparations, is especially valuable to the practicing physician. For the student it is desirable, for the reason that it is so arranged that he may, without an instructor, study the science experimentally.

The atomic hypothesis of Dalton is adopted, and the metric system of weights and measures used, which renders the work much more valuable, it being one of the first works on practical chemistry embodying modern ideas. H. J.

---

**The Functions of the Brain.** By DAVID FERRIER, M. D., F. R. S., Member of the Royal College of Physicians, Assistant Physician to King's College Hospital, Professor of Forensic Medicine in King's College, London. With numerous illustrations. New York: G. P. Putnam's Sons, 1822 Fifth Avenue. 1876.

This is a book among books, at once an exponent and a contribution to the scientific progress of medicine. The author's preface states, "My chief object in this book has been to present to the student of physiology or psychology a systematic exposition of the bearing of my own experiments on the functions of the brain. To do this satisfactorily I have thought it necessary to consider the functions of the cerebro-spinal system in general, with the view more especially of pointing out the mutual relations between the higher and the lower nerve centers. Throughout I have aimed at a concise digest rather than an encyclopædic account of the various researches by which our knowledge of the brain and spinal cord have been built up."

This quotation will give a correct view of the purpose and scope of this most interesting work. It is a work not for careless reading, but for thoughtful study. Thus studied it

will give to every one a better insight into many forms of brain disease, and guide him more intelligently in their treatment.

The book contains thirteen chapters, the subjects of them being as follows: Sketch of the Structure of the Brain and Spinal Cord; Reflex Functions of the Spinal Cord; Functions of the Medulla Oblongata; Functions of the Mesencephalon and Cerebellum; Functions of the Optic Lobes or Corpora Quadrigemina; Functions of the Cerebellum; Functions of the Cerebrum; Phenomena of Electrical Irritation of the Cerebral Hemispheres; the Hemispheres considered Physiologically; Functions of the Basal Ganglia; the Hemispheres considered Psychologically; Diagrammatic Summary; Cerebral and Cranial Topography.

---

**Annual Report of the Massachusetts Charitable Eye and Ear Infirmary, 1876.**

This is the fifty-first annual report of one of the many creditable charities in which Boston abounds, and is full of statistics interesting to the profession. The infirmary is in the hands of able surgeons.

---

**The Kentucky Infirmary for Women and Children.**

This infirmary was instituted during the last summer, and has enlisted the hearty coöperation of some of the best citizens, male and female, of Louisville. In their hands it can hardly fail to prove a blessing to the community. This report shows some good work already done by its medical staff.

# Clinic of the Month.

CHLOROFORM.—The following is an abstract of lectures on chloroform, by John Chiene, Lecturer on Surgery Edinburgh School of Medicine, found in the Practitioner, January, 1877:

The present outcry against chloroform is the result of an imperfect understanding of, (A) Its physiological action; (B) The proper method of administration; (C) The dangers which may accompany its use, and their treatment; (D) The dangers which follow its abuse, and their treatment.

The more perfectly the surgeon understands these considerations, the greater will be his confidence when called upon to give the drug. Confidence on his part will impart confidence to his patient; knowledge of the dangers may make him more anxious at first, until he gains experience, but this is surely safer for the patient than the ignorant confidence of the administrator who has not this knowledge. Ignorance may be bliss; knowledge certainly is power.

(A.) *Its Physiological Action.*—Chloroform is, first, a stimulant; second, a sedative; and when inhaled it passes into the blood and poisons in a certain order the nervous centers.

Its effects may be classed under five heads: First, abolition of voluntary motion; second, abolition of sensation; third, abolition of reflex action; fourth, stoppage of respiration; fifth, stoppage of the heart's action.

Our object is to attain the first three effects, and to avoid the fourth and fifth. It is not necessary to discuss the exact order in which these effects take place. Tbe great practical fact is this, that the first three always precede the fourth and fifth when the stoppage of the respiration and heart's action

is due to the chloroform. It is to be remembered that when laryngeal obstruction occurs, respiration may cease from faulty or delayed treatment on the part of the administrator. The heart's action may cease from shock, too little chloroform having been given before commencing the administration. The action of the heart may also cease in consequence of engorgement occurring secondarily to a delay in the treatment of laryngeal obstruction. These dangers are preventible accidents which may occur during the administration; and are in no way to be confounded with stoppage of the respiration and heart's action directly due to a poisoning of the respiratory and cardiac ganglia by an overdose of the drug.

Chloroform is a cumulative poison; after a person is once fully under its influence, a very little more is required to place the patient in a dangerous condition. Chloroform is also a volatile poison, and even after the respiratory and cardiac ganglia are affected, if the patient is kept alive for a time by artificial respiration, the effects of the drug will pass off, unless the overdose has been excessive.

(B.) *The Proper Method of Administration.*—Simple means are the best. A towel or handkerchief is better than any apparatus. If any apparatus is used, then the administrator trusts to the apparatus. The only sure trust is knowledge of the action of the drug, its dangers and their treatment. It is a matter of no importance how much is poured on the towel, except as a matter of economy; what has to be carefully attended to is the effect the drug has upon the patient. The administrator has to give his entire attention to the effect of the drug; as in all drugs, so in chloroform, different patients require different doses in order to attain the proper effect. The administrator must use his brains, and have his catch-forceps attached to his coat. He must have confidence in himself.

The flannel cap covering the nose and mouth, as first recommended by Dr. Skinner of Liverpool, and as used in the eye-wards in the Edinburgh Royal Infirmary, is not so good in general surgical practice as the towel or handkerchief, because,

as will be afterwards explained, it is by the sense of touch that we best judge of the respiration, and the cap over the nose and mouth prevents the hand being next the mouth for this purpose.

The administrator must watch the breathing and the appearance of the patient. The sense of feeling with the hand between the towel and the mouth is the best guide to the breathing. The heaving of the chest has also to be watched. The heaving of the abdominal walls is deceptive, as this may be due to contractions of the diaphragm, which may continue for some time without any air entering and being expelled from the chest. Voluntary stoppage of the breathing frequently occurs early in the administration. Experience will soon enable the administrator to understand this, and to distinguish it from stoppage of respiration, due to the action of the drug on the nervous centers which govern the muscles of respiration. The sense of hearing may also assist in enabling the administrator to judge of the breathing. In antiseptic surgery, the use of the steam spray, accompanied by a hissing noise, interferes with the sense of hearing; in such cases the surgeon must trust to the senses of touch and sight. If the breathing becomes shallow or irregular, accompanied by gasping or sighing, then the towel must be at once removed from the patient's face. When the breathing becomes deeply stertorous, then the patient has as a rule had sufficient; the towel must be at once removed. Stertorous breathing is not in itself an evidence of danger.

The appearance of the patient's face is also to be watched. As long as the lips are red the blood is being properly aërated, the circulation and the heart's action are unaffected. If the patient becomes livid, or unnaturally pallid, then there is danger. Tell the patient that he is to take long breaths. Give the drug slowly at first, in order to prevent a choking sensation. Do not let the towel rest on the face, because it is apt to cause blistering. After a time the patient struggles involuntarily; do not fight with him; guide his movements, and as the drug takes effect they will soon subside.

How are you to know when the patient has had enough? There are three signs, all of which should be made use of:

1. By touching the conjunctiva; if the patient does not contract his orbicularis palpebrarum, then he is generally sufficiently under the influence. Sometimes, however, this is not a certain sign; the action on the nervous centers is progressive; although sufficient for an operation in the region of the eye, the drug may not yet have affected the whole of the spinal cord, and reflex action in the limbs may not be abolished.

2. Muscular relaxation, judged of by raising the arm and seeing if it falls heavily by the side.

3. Local sensibility at the seat of the operation. This is to be estimated by the surgeon pinching the part to be operated on with a pair of artery forceps.

These three signs are all useful, and experience will enable the administrator to estimate their proper value in each case. Take away the towel the moment the patient is under the influence. A very common mistake is to suppose that if the patient is breathing, then all is right. When the breathing stops, then the patient is on the point of death. No attention is to be paid to the pulse; it is the last thing that stops. When the stoppage of the heart's action is due to the drug, then the patient is dead. Fortunately the poison is a volatile one, and if from ignorance too much has been given, interfering with the action of the heart, either directly by acting on the nervous centers which govern the heart's action, or indirectly by stoppage of the circulation, the heart may recover itself if the patient is kept alive by artificial respiration until the poison, in consequence of its volatility, is dissipated.

The administrator has to devote his attention to other things, and if he attends to the pulse he can not pay sufficient attention to the more important signs—important because they occur earlier in the administration. Attention to the pulse by a second person is not necessary, because the signs which I have already given will be quite sufficient to prevent danger; there is a division of responsibility; assistance is apt to make the administrator trust to his assistant, and not to be

sufficiently watchful himself of the other signs which guide him in the administration. It is not necessary to use the stethoscope in order to test the propriety of giving chloroform. If there is heart disease, or weak action of the organ, then these are the very cases in which chloroform is most useful, because they are most liable to the occurrence of shock, which the drug prevents by abrogating sensibility.

(C.) *The Dangers which may Accompany its Use, and their Treatment.*—We must always be prepared for these. They may occur in any case, because the drug acts with much greater rapidity in some cases than in others, and we can never in any case foretell how rapidly the drug may act. The frontier line between the abolition of sensation, voluntary motion, and reflex action, and stoppage of the circulation and heart's action, is often very indistinctly marked. In old people this is the case; in them the drug must be administered with the greatest caution. We may reach the dangerous effects earlier in some than in others; hence the great care necessary in every case. The order in which the effects take place is the same in all. This must be distinctly understood.

These dangers may be classed under four heads:

1. *The tongue falling back* and closing the glottis, in consequence of paralysis of the muscles which hold the tongue forward. The signs of this are lividity of the face and shallow breathing, as the air does not enter and leave the chest in sufficient quantity. The patient is in the same state as if a piece of meat had stuck in his pharynx, closing his glottis. The piece of meat is his tongue.

2. *The glottis closing*, due to paralysis of the intrinsic muscles of the larynx. The signs of this are lividity and a crowing sound, as heard in a case of croup, acute laryngitis, or laryngismus stridulus.

3. *Fainting.*—This is due to an imperfect supply of blood to the brain, the result of either the sitting posture during administration, as the dentist's chair, or to a naturally weak heart in the aged or prematurely aged person. The sign of this is unnatural pallor of the face, judged of more especially

by the paleness of the lips. The faintness may be due also (at the commencement of the administration) to fear on the part of the patient. It may also be due to any cause which may give rise to faintness in general. In this case the chloroform has nothing whatever to do with the faintness; it may be associated with, but in no way due to the chloroform. The faintness may also be due to want of confidence on the part of the administrator. He fears the drug, from ignorance of its physiological action. He commences the operation before the patient is sufficiently under the influence. The patient is then in a condition which renders him most liable to shock. He is unable to brace himself up to bear the pain; his nervous centers are in a semi-paralysed condition. The unfortunate result may follow, namely, imperfection or stoppage of the heart's action, followed by syncope.

4. *Vomiting.*—This is only dangerous if there is food on the stomach. The food passes into the pharynx, and may pass through the semi-paralyzed larynx and cause suffocation by passing into the bronchi. If the stomach is empty this danger can not occur.

Treatment of these dangers:

1. *The tongue falling back.*—The head is to be turned on one side in order that by its weight the tongue may pass to one side and the opening of the glottis may be free for the entrance and exit of air. If this does not *at once* effect the object, then the tongue must be removed from its dangerous position, and for the same reason that, if a person is choking from a piece of meat lying on his glottis, the proper treatment is to remove the obstruction. The best way to do this is to seize the tongue with the catch-forceps and pull it forward, so that the tip of the tongue appears between the teeth.

2. *The closure of the glottis*, due to paralysis of the intrinsic muscles of the larynx. To remedy this danger the tongue must be pulled forcibly out of the mouth. By so doing the epiglottis is pulled forward by stretching the ligaments which unite it to the tongue; the epiglottis, passing forward, stretches the arytenoëpiglottidean ligaments, and separation

of the vocal cords follows. The action here is purely mechanical, and was first explained to me by Dr. John Wyllie, who first described this effect of forcible traction on the tongue. This can be verified on the dead subject.

If these two dangers are not treated *at once*, the result is that respiration does not proceed, the blood is improperly aërated, the lungs become gorged, the heart becomes gorged, and the result is stoppage of the heart's action. If a rabbit is killed with chloroform and the chest opened, the heart will be found to be gorged with blood, and the contractions of the heart will be in abeyance; prick the heart with a needle, allow some blood to escape, and the contractions of the heart are reëstablished. This experiment seems to show that if by striking the chest and by artificial respiration the action of the heart is not quickly reëstablished, then bleeding from the external jugular vein should at once be resorted to. I have never yet required to have recourse to this remedy, artificial respiration having been sufficient. It must be remembered that it should never occur unless by a fault on the part of the administrator in not using at once the proper remedies—either removal of the tongue if its acting is a mechanical obstacle to the admission of air, or forcible traction of the organ if the obstruction is in the larynx itself, in consequence of paralysis of the intrinsic muscles of the organ.

3. *Treatment of Fainting.*

1. *Preventive.*—Never give chloroform in the sitting posture. Never commence any operation, however trivial, until the patient is fully under the influence of the drug; it is far better not to give chloroform at all than to use it imperfectly.

2. *Curative.*—If it occurs as a result of a weak heart, or in consequence of an excessive loss of blood during the operation, or as a coincidence during the administration of the drug, then the head must be at once placed at a lower level than the body, the arms and legs must be raised to the vertical, or the patient may be held up by the heels, as recommended by M. Nelaton. The effect in all these ways is attained of restoring a sufficient supply of blood to the brain.

The good effects of Nelaton's practice are, in my opinion, of a two-fold nature: First, by restoring the proper supply of blood to the brain in the most efficient and quickest manner; second, in many of the cases the danger may have been at the opening of the glottis, due to obstruction by the tongue; inverting the patient will at once remedy this by causing the tongue to fall forward. It will also be useful in cases in which blood, in operations about the mouth and nasal cavities, has passed into the bronchi, or in cases in which vomited matter has passed into the larynx, the foreign body being removed by inversion, as Brunel removed the half-sovereign from his bronchial tubes. The frequency with which Nelaton's practice has been attended by good results in cases of apparent death from chloroform seems to show that inversion may act in this two-fold manner, because obstruction of the glottis is a much more frequent danger in the administration of chloroform than faintness, which, as far as my experience shows, is comparatively rare.

4. *Treatment of Vomiting.*—Do not give any solid food for four hours before the operation. In railway accidents and other sudden injuries in which it is necessary to give chloroform, the greatest care must be taken; if vomiting occurs during the administration, turn the patient on his side in order to allow the vomited matter to escape from the mouth, and prevent any regurgitation into the bronchial tubes. In such cases the administration of the chloroform should be abstained from until the stomach is empty. When the act of vomiting takes place, the stomach being empty, then the administration of more chloroform is required, in order to stop the abnormal contractions of the muscular walls of the stomach. There is in such a case no danger from vomited matter passing into the larynx.

(D.) *The Dangers which Accompany its Abuse, and their Treatment.*—If an overdose of chloroform is administered—and it must be remembered that some patients are very susceptible to the action of the drug—the nervous centers which rule the muscles of respiration are poisoned; the patient has

died of an overdose of chloroform; then the treatment required is to pull the tongue forward in order to allow air to enter or leave the chest by artificial respiration. It is a volatile poison, and perseverance in artificial respiration must be continued until the volatile poison passes away. A case recorded by Dr. J. J. Brown, in the Edinburgh Medical Journal, November, 1874, well illustrates this important fact. By artificial respiration, kept up continuously for two hours and three-quarters, he saved a patient in whom complete paralysis of the respiratory ganglia had occurred, but the cardiac ganglia were unaffected. The case also shows that the respiratory ganglia are poisoned before the cardiac ganglia. When the overdose is excessive, then the heart's action is interfered with; by artificial respiration, striking the chest-wall with a wet towel, and the use of the galvanic battery, it must, if possible, be restored.

Rupture of the Bladder and its Surgical Treatment. Dr. MacDougall, in a paper on Rupture of the Urinary Bladder and its Surgical Treatment (Edinburgh Medical Journal, January, 1877), reports two cases of such rupture followed by recovery, and then considers the diagnosis, prognosis and treatment:

*Diagnosis.*—The history and the symptoms, even in those cases where there is no external injury, are generally quite characteristic. Certain enough, at all events, they are for the treatment hitherto followed, a treatment which, in most of its details, has this wide applicability, that it is suitable in almost all cases of abdominal lesion. Should, however, operative interference be decided upon, an accurate diagnosis is of greater moment. Following the cautious use of the catheter, a proceeding which may be rendered of even more service if we combine examination by the rectum with it, physical examination of the abdomen should be carefully made. In most cases absolute dullness will be found to exist in the hypogastric, and possibly in one or both iliac regions; while, by palpation, the presence of fluctuation may even be detected.

The use of the aspirator will place the presence of fluid beyond all doubt, and a very simple examination of that fluid by boiling will determine, by means of its smell, the existence of urinary solids.

The *Prognosis* must always be a grave one; surgical records tell but a sad tale as to the issue in cases of injured bladder. Let me quote from the writings of some who have devoted attention to the subject:

Mr. Birkett says that notes "of fifty examples of this injury show that, with the exception of three cases, all terminated fatally. Of the three cases which recovered, in one only the symptoms were those of extravasation into the peritoneum." Dr. Stephen Smith, of New York, reports five cases of recovery out of seventy-eight. Mr. Le Gros Clark writes, "I have never met with, or, perhaps I should say more correctly, I have never verified, an instance of recovery after rupture of the bladder;" yet he does not believe that the lesion is necessarily a fatal one—in fact, in one case which he relates there can be little doubt that the bladder was ruptured, the only, and to him the greatest, reason for thinking that it was not, was, that the patient recovered.

Sufficient such testimony is to the great danger attending the accident; and now as to its *Treatment*. On this point there is, I believe, room for innovation. Some cases dying rapidly, no doubt, in great measure from the shock attending the sudden outpouring of urine into the cavity of the peritoneum, admit of little help; their fate is too quickly sealed. But these are the exceptions, the majority living days, it may be many days, after the accident, die either from peritonitis or from the septicæmia which sometimes follows it. Dependent upon the situation of the rupture is the method of treatment pursued. In cases in which the viscus gives way anteriorly, and below the line of reflection of the peritoneum, the procedure necessary in all cases of urinary infiltration must be carried out. Free and deep incisions must be made into the infiltrated tissues of the abdominal wall, and followed by the application of poultices sprinkled with charcoal.

This form of extravasation is rare; much more frequently the rent is in the posterior aspect of the bladder, involving all its coats, and consequently opening into the great sac of the peritoneum. How seriously this membrane resents irritation, the sequel soon shows; acute inflammation makes its appearance—one step, however, it is, and a most important one, towards a cure; lymph is effused in and around the neighborhood of the wound, and sometimes the pelvic peritoneum is shut off from that of the general cavity of the abdomen. This fortunate result does not often take place, and the explanation is an easy one; the form of peritonitis induced by infiltration of urine is not often sthenic, and attended with the formation of lymph; it is much more often that low form of the disease in which a sero-purulent effusion, having few organizable qualities, is the result. The nature of the accident, and its consequences, demand in the treatment two distinct proceedings: the first, to endeavor to keep the bladder empty and at rest, with the hope that the wound may heal; second, to combat the attendant inflammation.

In order to carry out the first, the use of the catheter is necessary. This can be managed in one of two ways; either the instrument must be introduced at regular intervals, or it must be retained in the bladder. Attendant on its frequent use is the obvious risk that its point might, coming in contact with the injured surface, break down the tender adhesion which had been formed, and so reëstablish the rent. Against its retention can be urged the mechanical irritation the instrument is apt to give rise to, owing to the body of the organ being always contracted around it. The use of the soft French instrument, however, quite overcomes this; that it is a better and safer proceeding than passing an instrument frequently, I have no doubt.

As regards the peritonitis, here, as in all forms of this disease, we can most rely upon the use of opium. Over and above its quieting and curative influence in such cases, it has the additional advantage that it diminishes very appreciably the amount of urine secreted. From the constant application

of anodyne fomentations great benefit is derived, and in the free use of ice and weak beef-tea we not only do enough to support the patient, but do the best to render the urine as bland and unirritating as possible.

So far we have considered what may be quite regarded as the ordinary course of procedure in cases of rupture of the bladder, and that it is not altogether unattended by success, the result in Dr. Thom's case shows. The observations of those, however, who have had a large and extended experience, some of which I have already given, go to prove that the recoveries are very rare, the fatality attending the accident very great. With such records, written as it were against us, it behooves us to inquire whether there be not other means of treatment more likely to be followed by success. One or two suggestions have been made; that they have ever been successfully acted upon I do not know, but it is well to consider them.

Professor Miller says: "Should the patient survive for a day or two, it is possible—as dissection has shown—that by inflammatory agglutination of the abdominal contents the great cavity of the abdominal peritoneum may be shut off from that of the pelvis, the latter becoming coated with lymph like an abscess, and the urine confined there; under such circumstances it has been proposed to tap the cavity from the rectum by a long and curved trocar."

That this would be neither an easy nor a satisfactory procedure, my experience in the case I have related showed me. Even with great part of my hand in the rectum, it was with difficulty I could reach the upper border of the contracted bladder, and I certainly quite failed to detect such evident fluctuation as would have warranted the plunging in of a trocar. Moreover, were this only to be undertaken after days had passed, and after peritonitis had been followed by such marked effects, the results one would hardly expect to be very satisfactory.

Mr. Bryant, after mentioning the method by retention of a catheter, writes: "It seems probable that a free incision

through the perineum into the organ, as in lithotomy, is the better practice." This proposal, with certain evident advantages, has, I think, less weight when we can use so well and so safely the *soft* catheter. True, the outlet for urine through it is not so free or so direct as a full-sized lithotomy tube would make it; the question would very much depend upon the balance found when the increased risk attending such an operation was carefully considered with the amount of likely advantage to be gained from it.

Mr. Holmes says: "It has occurred to me whether it would be justifiable when the laceration clearly involves the peritoneal cavity, . . . to cut freely into the abdomen, draw up the bladder, unite the wounds in it with silver or carbolized gut sutures, wash out the peritoneum and close the opening, leaving a catheter in the bladder to obviate any distension of the viscus which might reopen the wound."

These words I read while my own case was getting well, but they became of more interest to me, and possibly carried more weight, inasmuch as the suggestion they convey is exactly what we had proposed to do had the aspirator failed. And that the suggestion is a valuable and practical one, and one well worthy of all consideration, I shall endeavor to show. That within the last decade abdominal surgery has made rapid and brilliant progress, all surgeons now acknowledge. To the anxious labor of ovariotomists is this in great measure due, and it is on the lessons that their experience has taught, that the advocacy of the treatment of rupture of the bladder by abdominal section can best be based.

One special class of case, that of rupture of an ovarian cyst, followed by peritonitis, bears, I think, no inapt comparison to a case of ruptured bladder. In both we have a sac, containing fluid more or less irritating in its character, suddenly ruptured, and the contents effused into the cavity of the peritoneum. In both a similar result follows, general peritonitis of a low type, in many instances accompanied with more or less sero-purulent effusion, so that with the symptoms attending the progress of a most grave serous inflamma-

tion we are apt to have superadded the peculiar dangers of septicæmia. The subject of ovarian disease who had suffered rupture of the cyst, and in whose case the conditions I have referred to had supervened, was, until very recently, regarded as beyond all beneficial interference, but not so now.

Dr. Thomas Keith, writing on Suppurating Ovarian Cyst, tells most graphically his experience; and to show how desperate his cases were, and how admirably well they did, I borrow somewhat from him. In his first case, where suppuration of the cyst had occurred, and peritonitis as a consequence, he writes: "This was probably the first time that surgery broke in upon an acutely inflamed peritoneum. The intense lividity, amounting almost to blackness, of the abdominal contents, and the spongy tenderness of inflamed intestine, were then strange to me, though little thought of now. Recent lymph was present everywhere, adherent bowel and mesentery hedged in the thick-walled cyst, the base of which was in a complete state of slough. Inflammation had gone on to gangrene, and there was intense putridity. . . . The operation lasted two hours; recovery without a drawback."

And again in another case, where pus had been removed by tapping, and the patient sent to the country to recruit previous to operation, the sac gave way. She was not seen for twenty-four hours after the accident; then "she was almost pulseless, quite cold, with lividity of hands and feet, while the labored catching respiration showed the nearness of approaching death. The abdomen was enormously distended and resonant at the umbilicus. It was evident that the cyst had given way, and that its purulent contents had escaped into the cavity of the peritoneum. Though it seemed then almost useless, I turned her on her side, opened the abdomen with a lancet at the umbilicus, and pressed out two basinfuls of pus and fibrinous clots. . . . Pulse on the morning of operation was 110, very feeble, and temp. barely 97°. Adhesions were almost universal, mostly recent, and bleeding was unusually free; the peritoneum was of a livid color, showing everywhere signs of recent inflammation. 26th day—Patient is quite well."

Mr. Spencer Wells, in considering this question, makes this statement: "In several of my cases of ovariotomy, the operation was performed after the cyst had burst, and its contents had escaped into the peritoneal cavity. The peritoneum has been found intensely red, thick, soft or villous, and occasionally covered by loosely adherent flakes of lymph. Yet the result has been surprisingly satisfactory. The irritating cause having been removed, the irritation has subsided. If the cause had not been removed, death must have happened at no distant period, as all the general and local symptoms of chronic diffuse peritonitis had in the whole series of cases followed the rupture. Twenty-four times has this complication presented itself out of the last three hundred of my operations. Five of the patients have died. . . . At any rate, the bursting of the cyst or the filling of the peritoneum by oozing from the puncture made by tapping the cyst is no bar to the operation of ovariotomy, but rather a reason for doing it without delay."

Such a statement as this, taken in connection with the cases of Dr. Keith, prove unquestionably that, at all events, inflammation of the peritoneum having supervened, should, instead of being a reason against, go strongly for abdominal section in cases of rupture of the bladder. The mere incision would be but the preliminary step, and were it productive of no other good, it would, at all events, enable the operator to sponge out thoroughly the inflamed cavity, removing at one and the same time what remained of the irritant cause of the inflammation, and the dangerous products to which the diseased action is so apt to give rise. That even this would be highly beneficial, the experience of ovariotomy shows. Fully one-third of the deaths following this operation are the result of septicæmia, a direct issue of the absorbent power of the peritoneum. Lightly as this sensitive membrane must be dealt with, most operators acknowledge that the risks from irritation following its careful cleansing are small compared with those following the retention of decomposing fluids in its cavity. Wells says: "When I began to insist upon the im-

portance of this process, other operators said it was unnecessary or injurious; that ovarian fluid in the peritoneum was harmless; or that the time lost in removing it, or the irritation caused by the sponging, were greater evils than a little fluid or blood left in the cavity. . . . I have regretted incomplete sponging, never that I had been too careful."

Bland's case afforded evidence of how much good might be done in this way. It taught not only the rapidity with which effusion may follow the establishment of peritonitis, but the danger attendant upon its retention. Twenty-four hours after the primary aspiration, the urine ceased to flow by the catheter, and superpubic dullness indicated the presence of fluid in the peritoneum. Having every reason to believe that the bladder had again given way, and that the urine was again being extravasated, Mr. Spence tapped the peritoneum, and withdrew some ounces of bloody fluid. This on examination proved to be inflammatory effusion and not urine. It was sero-purulent, unorganizable, and was no doubt a potent septic fluid. Days after his accident, and when the gravity of many of his early symptoms seemed past, active delirium, wavy temperature, a feeble pulse, and typhoid look—all told the tale that what necessarily was left of this fluid, or what of it was afterwards poured out, had done its work. That his ultimate risks were as great from his septicæmia as from his peritonitis, we all believed.

Then, as to securing the wound in the bladder in most cases of intraperitoneal rupture, this could with ease, I think, be accomplished. Occurring, as the laceration generally does, behind the region of the urachus, an incision between the umbilicus and pubes would give a fairly good view of it, and the general laxity of the vesical connections would enable its being readily drawn into the abdominal wound. Once there, catgut sutures should be introduced, avoiding in their introduction the mucous membrane. The success of Professor Brün of Tubingen, in treating by silk suture the bladder wound in the high operation for stone, gives proof of the safety of the proceeding.

Even after such an operation, attended with success in all its steps, the retention of a catheter in the bladder for at least a fortnight would be necessary. If thought fit, and it would I believe be a safe measure, a glass drainage-tube could be passed from the lower part of the abdominal incision to the bottom of the recto-vesical fold, so that primary adhesion of the laceration failing, and extravasation again occurring, the fluid could be removed. One parting word as to the use of the aspirator. That it is a safe and valuable proceeding I do not doubt, and that it was productive of much and decided benefit in Bland's case I believe; still, after having thought often and anxiously over the matter, I have come to the conclusion, that taking it all and all, the treatment advocated by abdominal section is really the most likely to be followed by success.

Bromhydric Ether—Its Physiological Properties, and its Mode of Elimination.—M. A. Rabuteau communicated to the Academy of Sciences, (*Archives Générales*, February, 1877), researches upon the physiological properties and the mode of elimination from the economy of bromhydric ether, or the bromide of ethyl. This substance is a colorless liquid, of agreeable odor, boiling at 40°, its density 1.43, and burning with difficulty. Its boiling point and density are intermediate between those of chloroform and ether. Rabuteau's conclusions are as follows:

First. Bromide of ethyl absorbed by the respiratory surface produces anæsthesia more rapidly than chloroform. Experiments were made upon frogs, guinea-pigs, rabbits and dogs. At the expiration of five minutes, and sometimes of two, inhalation from a sponge saturated with the bromide, the dogs were completely anæsthetized.

Second. Animals recover more rapidly from this than from chloroform anæsthesia.

Third. Having previously injected under the skin, in dogs before the anæsthesia, solutions of chlorhydrate of narceia or of morphia, I have observed a similar though perhaps less

decided effect, to the simultaneous action of narceia, or of morphia and chloroform.

Fourth. Bromhydric ether is not caustic, not even irritant, compared with chloroform. It can be swallowed without difficulty, applied without danger, not only upon the skin but to the external meatus auditorius and to mucous membranes. It is, therefore, preferable for such purposes to chloroform, which is quite caustic, and to sulphuric ether of which the ingestion is almost impossible.

Fifth. The bromide of ethyl taken into the human stomach, in doses of one to two grammes, does not produce anæsthesia as when inhaled. It relieves pain. It does not affect the appetite.

Sixth. This anæsthetic is almost insoluble in water; nevertheless water stirred with it possesses an agreeable odor and taste. Frogs immersed in water saturated with the bromide are anæsthetized in ten to fifteen minutes.

Seventh. The bromide of ethyl is eliminated almost entirely by the respiratory surface, whatever may have been the mode of absorption. Only traces of it can be found in the urine when taken by the stomach—only the very least quantity when inhaled. The bromide of ethyl is not decomposed in the organism, resulting in an alkaline bromide such as the bromide of sodium, a salt readily eliminated by the kidneys.

Death from Vesico-Vaginal Fistulæ.—In the *Annales de Gynécologie*, January, 1877, Verneuil has a valuable article upon the mortality from vesico-vaginal fistulæ and some rare accidents succeeding exploration and operation. He states that vesico-vaginal anaplasty is unhappily not always innocuous. "For my part I have to regret losing several upon whom I have operated, and have witnessed serious accidents in others. The affection itself, even without surgical intervention, is not always devoid of danger. In my unsuccessful cases I do not think I have committed any notable surgical error—before, after or during. Nevertheless I have lost five patients out of eighty. Two others have nearly died, one by

erysipelas, another by embolism; several times threatening abdominal inflammations have occurred, which although yielding to treatment caused me great anxiety. The statistics of other surgeons are apparently more favorable, but I am not certain that they are complete. Nevertheless as I can not dispute their figures without having in possession the proofs of incorrectness, I leave my *confrères* the satisfaction of their fortunate practice, but shall seek to warn young practitioners against a too positive optimism."

In the first of Verneuil's fatal cases death occurred from peritonitis at the end of eight days; in the second, from the same cause in three days; in the third, in forty-eight hours; in the fourth, operated on the fourth time, the eighth day; in the fifth, the peritonitis did not occur until the eighteenth day after the operation, and was fatal in three days. He reports other cases of death where no operation was performed, one under his own observation, and another from Richet: in Richet's case peritonitis ensued the day after an examination of the fistula.

Verneuil's experience is not in accord with that of American operators. For example, Dr. Emmet had, up to April, 1868, operated successfully in more than two hundred cases, without a single death. Dr. E. observes, in his Treatise on Vesico-Vaginal Fistula, "Death as a consequence of this operation, is comparatively a rare accident; yet a sufficient number of cases have already been put on record, for us to estimate its occurrence as one of the possible dangers."

Arsenic in Chorea.—Dr. Edward Labarraque reports, in the *Gazette Obstétricale*, February 5, 1877, a case of chorea at Lariboisière, under the charge of Siredey, treated successfully by large doses of arsenious acid.

The subject was a girl fifteen years and a half old, menstruating regularly since fourteen, and who for eight months had been affected with chorea, the disease occurring without known cause—no mental emotion, no fright, no rheumatic diathesis. The convulsive movements were limited to the left

arm and limb, and left side of the face; in short she presented the signs of left *hemichorea*, the form most frequently observed. There was not even any muscular weakness, still less paralysis, nor was sensibility diminished, although Trousseau insisted upon anæsthesia and paralysis as characterizing chronic chorea. She had been in the hospital eight days, five or six under treatment, and the improvement was most marked. Siredey stated that he had frequently been successful in this disease by arsenic, provided it be given freely and in very large doses up to the degree of producing the commencement of the pathological effects of the remedy. The solution of Boudin, (arsenious acid one gramme, water one thousand grammes,) was used in this case, the daily dose at first being twenty-five grammes, then thirty-five grammes; that is, from two centigrammes to three centigrammes and a half of arsenious acid.

The Transmissibility of Syphilis by the Milk.—To test the question—Is syphilis transmissible by the milk? R. Voss injected the milk of a syphilitic woman into three prostitutes. The woman was suffering from a papular syphilide, with condylomata on the genitals and anus; the breasts were, however, quite free from disease. The milk was obtained by expression, and a Pravaz's syringeful was injected into each prostitute. The first being syphilitic, the inoculation was naturally without result. The second suffered from a urethritis, and she remained unaffected. The third, sixteen years old, who had never been affected with syphilis, had come into the hospital on September 16th, for a urethritis, and was subjected to the injection of the milk on the 27th. The injection produced a large inflamed swelling, similar to what occurred in the first patient, and this gradually diminished and disappeared by the 24th of October. On the 3d of November—forty days after inoculation—a papular eruption showed itself round the seat of the injection; and on the 8th, the whole of the body was covered by a papulo-macular syphilide. The glands were also generally affected. These symptoms disappeared under inunction. (Dublin Journal of Medical Science.)

# Notes and Queries.

MALARIA AND ETHICS.—First in the list of the Faculty of the Medical Department of the University of Nashville and of Vanderbilt University, is the name of that veteran medical editor and teacher, Dr. William K. Bowling. We know no one who can fill a large place so completely as this genial journalist, whose wit and wisdom illuminated the Nashville Journal many years; and it is well that the great double school of the south-west—not only having duplicity of name, but duplicity of action also, for it advertises a summer as well as a winter course—should have a professor not less remarkable for a large body than for a generous heart and big brain.

But the promotion of Dr. Bowling does not gratify half so much as the association of subjects he is called to teach astonishes us. We turn from the occupant to the chair he fills. That chair is *Malarial Diseases and Medical Ethics.* What relations malaria and ethics bear to each other is a question the answer of which we doubt if any one can find out. Has there recently been such zymosis in medical affairs at Nashville, that ethical laws have been disregarded, and hence those infringements have been considered as instances of zymotic disease, and therefore instruction in medical ethics becomes naturally associated with that in malarial disease? Or is the connection purely arbitrary?

However, without further bothering about the propriety of the association, we desire to express gratification at the fact that one medical college teaches medical ethics, and we hope its example will be promptly imitated by other colleges. The study of moral philosophy constitutes a part of every plan of liberal education, whether for males or for females. Now

when we remember that so many of our medical students never had a liberal education, and therefore were never Paleyites or Benthamites, or anything better, and that even those who had such education will be all the better, for direct instruction in the principles of right and in the rules of conduct relating to the medical life, we see at once the wisdom and justice of teaching medical ethics in our colleges.

Beside, no one can have lived many years in the practice of medicine without observing violations of the rules which should govern honorable gentlemen, the members of a liberal profession: possibly he himself may have lapsed thoughtlessly or ignorantly. And this leads us to observe that the majority of violations of such rules, charity would lead us to believe, are the results of ignorance.

The American Medical Association has adopted a Code of Ethics which in the main is wise, and the faithful observance of which greatly conduces to the peace, the dignity, and the honor of the profession. Possibly parts of it need modification, elimination, exposition, simplification. Doubtless, too, that Code in the hands of mean, cunning and vindictive men, has at times been used to work injury to individuals. Nevertheless the general results have been good, and were it swept away irreparable mischief would result.

We have stated that a charitable view of human conduct leads us to believe ignorance is the chief source of violations of this Code.

A., during the temporary absence of B., is called to the patient of the latter; but has he any right to continue his attendance after the return of B., or exert the least influence to supplant him, and secure himself as the family physician? Most assuredly not; and yet we have known this to be done time and again by men who claim to be gentlemen. Surely ignorance is here the cause of error—an ignorance which would have been impossible had Dr. Bowling taught them medical ethics when they were students.

Can a specialist advertise to the public, or even to the profession in medical journals? Can a man in general practice

advertise by his sign for special practice? Yet these things are being done openly, and no one whispers a rebuke. Even in the very journal where Dr. Bowling's honors and functions are set forth, we find the advertisement as a specialist of one of his colleagues. Yet the American Medical Association in 1869 declared that such an advertisement was a violation of the Code of Ethics. The other forms of advertising to which we have referred have a still less equivocal character.

But enough for the present, since we have shown, we believe, that the subject of medical ethics demands a careful study and faithful instruction, whether that instruction shall be given in connection with malarial diseases or not.

MITCHELL DISTRICT MEDICAL SOCIETY.*—The fourth anniversary of this society was held at Bloomington, Ind., on the 14th, 15th and 16th of February; Dr. J. A. Stilwell, president, Dr. G. W. Burton, secretary.

The first paper read was by Dr. J. Gardner on the subject, "Are Bacteria Normal?" He was followed by Dr. T. P. Carter with a paper on the "Antipyretic Properties of Quinia." Dr. Carter stated that a febrifuge is a medicine which drives away fever. Quinia is undoubtedly a febrifuge in malarial fever. It eliminates the malaria and is a specific for the disease, but can not be called a specific in continued fevers. When used in large doses in typhoid fever it is injurious, and Dr. C. has never witnessed its good effects except in convalescence. The writer reported cases from the practice of Dr. G. B. Wood, and of Drs. Peacock and Barclay, of London, to prove that quinia administered in large doses adds to the mortality in the continued fevers, and hence should not be employed.

Such views were once held by these eminent men, but Dr. Yost, in the discussion of the paper, said that they did not now advocate them.

In cerebro-spinal meningitis, Dr. C. gave the views of Dr.

* We are indebted to Dr. A. Maxwell, of Indianapolis, for this report.

G. B. Wood that in this disease the spinal cord is congested; and as quinia congests the spinal cord it would certainly be unwise to give it, notwithstanding some regard the disease of malarial origin.

The discussion of this paper was very general. Some advocated the use of quinia in a dose from fifteen to forty grains in the continued fevers, on the ground that it *did* lower the temperature, and did not depress the system like aconite and veratrum viride, and that class of remedies used by those who oppose the use of quinia as an antipyretic.

Dr. J. W. F. Gerrish next read a paper on "Railroad Injuries," a continuation of a former paper on this subject. One of the important points touched upon was the *shock* in these injuries. He stated that shock did not always manifest itself in proportion to the amount of injury. Shock is more injurious, and a higher rate of mortality follows it in railroad injuries, than in gunshot wounds or any other class of accidents. It is a fixed and immutable fact that shock depends more on idiosyncrasy than on any other cause; and the reason why it is more fatal in railroad injuries is on account of the more or less apprehension of danger, which adds to the shock; even the oldest operators have a certain dread. Hence this excitement and loss of cerebral power, connected with the injury, combine mental and physical causes to increase the shock. The habits of railroad employés, the short and irregular time given to meals and sleep, tend to derange their digestive and nervous systems, and the patient is less able to withstand injuries.

Another important point in the paper was the use and abuse of alcoholic liquors in this class of cases. At proper intervals and in small doses alcohol is valuable, but in overdoses—three or four ounces of whisky every half hour or hour—it opposes what it is intended to accomplish. It is too often the case when you reach a patient suffering from a railroad accident, and find him unconscious, that you are unable to tell whether the unconsciousness is due to shock and loss of blood, or whether the patient's brain is overpowered by

whisky. In shock all rough handling and large quantities of water should be prohibited; and opium, if given at all, should be given in small quantities and cautiously; after reaction then give it to secure rest. Sinapisms, stimulants by the mouth and rectum, should be administered in shock; and if the accident is soon after a meal, the stomach should be emptied by a mild emetic. In shock due to crushing of the ankle or knee-joint, Dr. G. has never seen a case recover, and therefore in these cases does not wait for reaction, but operates immediately.

The writer ably treated the physiological action of alcohol, tracing it from the time it enters the system till it overcomes the brain and produces death by asphyxia. Drs. McPheeters, J. D. Maxwell, Yost and Burton participated in the discussion of this paper, generally coinciding with the writer.

There were a number of cases reported to the society, among others one of death from puerperal fever, by Dr. McLaughlin, due to a portion of retained placenta.

The discussion of this case raised the vexed and unsolved question of the specificity of puerperal fever, Dr. Burton maintaining that there was no such thing as specific puerperal fever, and Dr. Gardner taking the ground that whether we had a specific origin or not, we had the fever resulting from the poison of specific diseases.

On the evening of the 15th, Dr. Chase, of Geneva, N. Y., read a paper on Therapeutics, which will probably appear in a future number of the Practitioner.

After the reading of this paper, the members were invited to a banquet given by the Monroe County Medical Society, and were pleasantly entertained by music, etc. The society then adjourned to meet in Mitchell, Ind., on the first Wednesday in May, 1877.

Dr. Griffiths' Treatment of Epilepsy.—The contribution from Dr. Griffiths in this number, will be read with especial interest in connection with the paper by Dr. Fitch in the last number.

College of Physicians and Surgeons of Indiana—Third Annual Commencement.—The closing exercises of this College were held in the Opera House, Indianapolis, on Tuesday evening, February 27th. Dr. George Sutton, of Aurora, President of the Board of Trustees, delivered a brief address, replete with excellent advice to the graduates. He was followed by Dr. Graham N. Fitch, Professor of Surgery in the school, who delivered an address of forty-five minutes upon Fashions in Medicine. It was delivered without notes, and contained many interesting historical facts and valuable deductions. It is unnecessary to say that the address was able, and most favorably received. Then the degrees were conferred, and the class valedictory, excellent in composition and in utterance, by Dr. T. C. Donnell, of Franklin, Ind., was delivered.

Indiana Medical College—Eighth Annual Commencement—Dr. Fletcher's Address.—The address on behalf of the faculty at the commencement of this institution, which was held on February 28th, was delivered by Professor William B. Fletcher, M. D., and was published in full in the Indianapolis Sentinel. It was well written, possibly more in the style of an essay than of an address, and contained no little practical wisdom, many capital hits at public follies and injustice in matters medical, and some excellent advice both for doctors and people.

Louisville University Commencement.—The commencement exercises of both the Law and Medical Departments took place at Public Library Hall, on Thursday evening, the first of this month (March). Elsewhere we have given the number of medical graduates. The class valedictory was by J. Curtis Harris, of Texas: "His style of delivery was easy and eloquent, and his address was an unusually good one." Dr. J. E. Crowe, Professor of Obstetrics and Diseases of Women and Children, delivered the Faculty address. The subject of Dr. Crowe's address was *Heredity*. A subject in

its philosophical discussion hardly down to the level of an average popular audience, was made quite interesting by many facts and illustrations adduced to support the positions taken.

A BAD MISNOMER.—The *Annales de Gynécologie*, December, in reporting the proceedings of the section of *Obstetrics* and *Gynecology*, of the International Medical Congress at Philadelphia, observes that the section was presided over successively by MM. Robert Barnes (de Londres), Simpson (d' Edinbourg), et Goodhell (de New-York). Doubtless, if New York is to have a *hades* of any sort, it will have a good one if it can get it. But we object not less to the transportation of Dr. Goodell from Philadelphia to New York, than to the transmutation of his name into Goodhell. What is fame worth when one of the ablest of American obstetric teachers, and one of the most brilliant of obstetric writers, can not have either name or residence given correctly by our French friends!

MEDICAL GRADUATES, 1877.—The medical mills have been grinding their annual grist, and have discharged their products. The Cincinnati colleges have contributed nearly one hundred and fifty to the noble army of doctors. The Indianapolis colleges conferred the medical degree upon fifty-one, but it was the *ad eundem* degree in six, so as to leave of regular graduates forty-five, twenty-two from the Medical College of Indiana, and twenty-three from the College of Physicians and Surgeons. The number graduated at Louisville is one hundred and sixty-three, divided as follows: "University" eighty, "Louisville" forty-seven, "Hospital" thirty-six.

DIGESTINE.—Dr. A. F. Shelley, Medical and Surgical Reporter, strongly recommends this new remedy, after using it for twenty-five years, as a specific for the vomiting of pregnancy, and as of greater value than the pepsines and pancreatines in the cases in which these are used. The preparation is now made by William R. Warner & Co., of Philadelphia.

An Undesigned Coincidence.—In the American Practitioner, December, 1875, in a paper entitled "Half an Hour with Smellie," the following sentences occur: "Speaking of the placenta, reminds us of a passage in which he points out its more easy delivery by traction when the implantation of the cord is marginal instead of central. How near he was in this observation to the discovery of the true mechanism of the delivery of the placenta, a discovery which was not made until nearly a century after he wrote!"

In the first volume of Smellie's Treatise, just issued by the Sydenham Society, under the editorship of Dr. Alfred H. McClintock, of Dublin, we find the editor remarking upon the same point as follows (p. 232): "From Smellie's observing how much more easy is the removal of the placenta by traction when the insertion of the placenta is marginal instead of central, we can see that he was not far from the discovery of the true mechanism of the delivery of the after-birth."

Dr. McClintock elsewhere in the volume (p. 123), quotes from the article in the American Practitioner, and it would seem at first glance as if the suggestion made in this passage should be similarly credited. But upon reflection, probably it would be better to regard the identity of thought and the similarity of expression as an undesigned coincidence.

Homœopathic Gynecology.—In the British Journal of Homœopathy for January, a writer on pathology and therapeutics of the cervix uteri, gives sixteen classes of ulceration, viz., strumous, venereal, gouty, osteo-arthritic, hepatic, mammary, cardiac, asthmatic, choric, cataleptic, epileptic, tetanic, special sensory, mental, moral, mechanical. In hepatic cases moschus is recommended; in cataleptic, cannabis; in tetanic, strychnia. In mental cases, we are told the memory steadily mends under anacardium, while even for moral ones the author does not despair. Could he give us a globule for want of faith? We might try it before the next number of the journal appears. (The Doctor.)